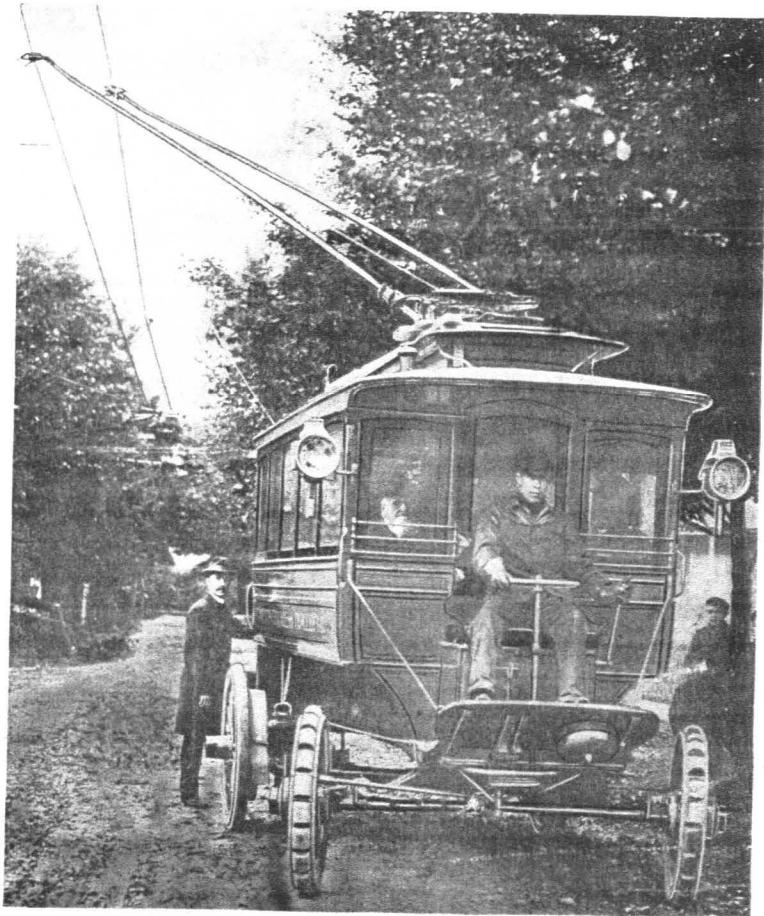


DECEMBER, 1903

THE
ELECTRICAL WORKER
OFFICIAL JOURNAL
INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS.



VIEW OF TRACKLESS TROLLEY 'BUS

As a Practical Wireman
 are you ever asked to recommend
 a line of
Standard Sockets—Rosettes—Cut Outs, Etc.
The “P. K.” Specialties
 present the *greatest advancement in this line*
in finish, convenience and satisfaction.

H. T. PAISTE CO.,
 Philadelphia, Pa.

Remember us by suggesting
“P=K”

A catalogue to any
 interested wireman.



Varicocele *Cured to Stay Cured in 5 Days*
Hydrocele *No Cutting or Pain.*
VARICOCELE Under my treatment this insidious disease rapidly disappears. Pain ceases almost instantly. The stagnant blood is driven from the dilated veins and all soreness vanishes and swelling subsides. Every indication of Varicocele vanishes and in its stead comes the pleasure of perfect health.
 I cure to stay cured, Contagious Blood Poison, Kidney and Bladder Troubles, Nervous Debility, and allied troubles. My methods of treatment and cure are original with me and cannot be obtained elsewhere. I make no experiments. All cases I take I cure.
Certainty of Cure is what you want. I give a Legal Guarantee to cure you or refund your money. What I have done for others I can do for you. My charge for a permanent cure will be reasonable and no more than you will be willing to pay for benefits conferred. I CAN CURE YOU at Home.
Correspondence Confidential! Write me your condition fully and you will receive in plain envelope a scientific and honest opinion of your case, FREE of Charge. My home treatment is successful. My books and lectures mailed FREE upon application
H. J. TILLOTSON, M. D., 248 Tillotson Building, 84 Dearborn Street, CHICAGO.

TOOLS
 FOR
Electrical Workers
 AS WELL AS EVERYBODY ELSE.

SPLICERS **PLIERS** **CLIMBERS**

LOUIS ERNST & SONS,
 129 MAIN STREET, EAST,
ROCHESTER, - - - - - NEW YORK.

—*The*—

ELECTRICAL WORKER

OFFICIAL JOURNAL OF THE INTERNATIONAL
BROTHERHOOD OF ELECTRICAL WORKERS.

Entered at the Post Office at Washington, D. C., as second-class matter.

VOL. IV. No. 2.

WASHINGTON, D. C., DECEMBER, 1903.

Single copies, 10 cents
\$1 per year in advance

THE "OPEN" SHOP

A Few of the High Points of Reason in Opposition

[A PAPER BY J. H. BABCOCK, WASHINGTON, D. C.]

ONE of the burning questions of the hour in American political and economic life of to-day is the one dubbed the "open shop," so termed from a recent decision on a point of law by our honored Chief Magistrate, and though his action, according to the spirit of law, was just and proper, still it has awakened an issue that is apt to stir to the deepest our industrial and political being.

According to the spirit of the statute law the President was justified in his stand of non-interference or discrimination, and even the most radical will not contend against him so far as his ruling dealt with the law of the case; but in our industrial economics—in that peculiar part of our national, commercial, and industrial life—it struck a blow like unto the ones that have waged nations and peoples into relentless wars, and caused struggles that have created nations like unto our own.

The decision struck a blow at what has become to the American work-a-day people a principle.

For legitimate and necessary purposes,

and from causes, the toilers of America have found it necessary to band themselves together, according to their various callings, into societies known as trades-unions.

These various unions, through powers peculiar to the emergency, have waxed strong in numbers, and have inaugurated many reforms for the benefit of the toiling masses.

TRADES-UNIONS A BUSINESS FACTOR.

Their growth has been natural and systematic. First, from the social and beneficial feature, as commercial and financial development has manifested itself, the trades-unions have become a factor in the business world.

The question of the "open shop," against the "closed shop," is a vital one to the two millions of organized toilers. It strikes at the very foundation and principle for which they are existing; and to those most vitally interested the principle has become so intense that it has become a part of their own being.

None will contend that according to our Constitution and laws a man is not his own free agent, so long as he obeys the laws, to

choose his own calling and pursuit of happiness. He may affiliate with a church, lodge, society, or labor union, as he may see fit, and is entitled to all he may get out of life. That is a matter for each to decide.

The so-called labor movement has reached that stage of development where it, in opposition with the vast combinations of capital, has assumed control of that commodity known as Labor.

It has taken control of the hours of labor to be sold for a price, and has established a minimum wage.

How has this object been accomplished?

By systematic organization and the development of business principles.

EFFECT ON BUSINESS PRINCIPLES.

And right here, let us look at the effect the "open shop" will have on the business principles of the labor movement.

In the days of disorganization there are naught but agitation, misunderstanding, striking, rioting, chaos, in which both sides lose and the industrial atmosphere is, to say the least, very murky.

With organization it is possible to inaugurate and consummate business principles, and to bring order out of chaos. It is possible to advance the grand element that the nations of the world are accepting. It is possible to sanely arbitrate differences, and through peaceful arbitration what are known as "shop agreements" are the result, by which a mutual agreement, or contract, is entered into, and industrial peace insured.

Can a disorganized mass or a large body of individuals be arbitrated with?

So, without going into further detail, we see that the "open shop" is a blow at the vital principle of sound business methods, the safeguard of all healthy progress.

Let us look with a glance at the cause for the "closed shop," the benefits and the precedents.

By the "closed shop" is meant an institution in which none but organized workers are employed. That is the first step in a business way—organization.

DEAL WITH PRINCIPALS.

The employer deals directly with the business head of the particular brand of labor he must use, just as he will bargain with the

business head of any financial or manufacturing firm.

Should a man of business need capital, he applies to a financial institution for the money, and not to the individual depositors. He dickers and bargains for terms with the head of a union of money lenders.

Is there any reason, if that be business, why that same business man should not deal with Labor collectively?

Take it any way you will, labor is as useful a commodity in enterprise as is capital, the only difference being that there is too much of labor to dispose of; but that is no reason why business methods should not prevail.

Why not bring the element of labor down (or "up" is the better word) to pure business principles, as well as the element of a quart of beans, a ton of coal, or a transcontinental enterprise?

Organized labor, honestly and wisely administered through the "closed shop" does this.

It needs not a lecture to the trades-unionist or the economist to emphasize the fact that the "open shop" is an incentive to child labor, and is a fatal blow at the observance of the Sabbath, for the "open shop" means the removal of all restraint to the "slaughter of the innocents" or to the Sunday closing movement, for which so much endeavor for good has been exerted on the part of Christian societies, not to mention the much-mooted labor movement.

PRECEDENTS FOR THE "CLOSED SHOP."

Now, as to the precedents.

There is no denial of the fact that that particular human interest known as the laboring element has a just right to organize and perfect its sphere of influence and usefulness along with other such known human interests as education, religion, finance, commerce, etc.

Yet, can any of these interests accomplish their highest aims without a most perfect, systematic, consolidated organization?

You of the legal profession: Do you not maintain a "closed shop?" Have you not laws governing entrance into your field of operation, and are not your requirements

becoming more and more strenuous? Can the backwoods railsplitters, with limited scholastic training, but with barrels of horse sense and honesty, readily pass your examinations and be admitted to practice?

You, also, of the medical profession: Are you not raising the standard of what you call proficiency, and do you not maintain what you term an "association," and can any enter your profession unless they conform to laws, otherwise known as "trade rules?"

Is there a more vigorous "closed shop" than what we term society? Would it be safe to indulge in the "open shop" principle in our relations to home and society?

All that portends for good advocates the "closed shop."

Our family life; our church; our society; yea, our Government.

Is there a family which will allow influences outside the family circle to enter and dictate the development and happiness and progress of that sacred union? It is sad to say that such unions are disrupted, with consequent unhappiness, and then absolute failure. Is not the peaceful, happy home a "closed shop."

Will your churches prosper and develop to the fullest the great Creator's noble work if the members of the Liquor Dealers' Association were allowed to have a voice in their management? We know what the result would be. Therefore, will not you, who worship God and love your church, declare for none but Christians to govern your church along Christian lines?

Is not the church, then, a "closed shop?"

Mind you, we are thinking along the line of principle, and principle that makes for some material good.

CAUSES OF CONTROVERSY.

Had the ukase of the "open shop" come from any other source it would have passed unnoticed. And were it not for ignorance, avarice, and nasty politics (which Labor should by all means eschew), a disagreeable controversy would not come between so noble and honest a man and so grand and progressive a human element as is represented in organized labor—a powerful economic movement, which, if properly received, developed, and controlled, means

much for the uplifting of the masses, and the consequent greatness of the nation, for it is the masses, not the classes, that makes a nation great.

The thinkers in the labor movement ask for rational and lawful precedents for the "open shop."

You, all, who are lovers of our glorious flag, with all that it portends, one question is put to you:

Are we not, as a nation, a "closed shop?" Are we not America for Americans?

Did not our fifth President, in the world-famous Monroe doctrine, declare for the "closed shop?" We believe in that. The nations of the world recognize the declaration.

A principle that is good for a Christian nation is good for an individual—is good for a trades-union, a business organization.

THE ARMY AND NAVY.

Are not our army and our navy what may be termed "closed shops?"

Many there are with patriotic hearts who would gladly place their lives upon their nation's altar in times of national danger. But can you, arduous ones, at your own will? No; our army and navy are of picked men, young men, loyal men, who must pass a most rigid examination, and submit to strict and exacting discipline. The business principles of war are adhered to, and we are invincible.

Our national immigration laws. Are they for "open shop" or otherwise?

Our critics will answer that we are "open shop," with a "but."

Ah! so are the trades-unions, and they emphasize the "but."

The time was when our ports were open to the immigrants of the world—"except."

Can any one remember the case of the "heathen Chinee?"

To-day are we an "open shop" to the world in the item of immigration?

Read the laws, and we have your answer, and we may thank the great labor movement for the "closed shop" laws that caused America to cease to be the dumping ground for the paupers of the world.

A RADICAL "CLOSED SHOP."

And last, though not least, we call attention to what is meant to be a valued adjunc

THE ELECTRICAL WORKER

to the United States Government. We refer to the civil service.

Can any man or woman, losing sight of all other confusing exigencies, conceive of a more potent advocate for a "closed shop" in all the vast machinery of the Government?

Can any man or woman within the confines of the vast domains of this great Government earn a livelihood from the treasury of our vaunted homeland, no matter what may be the qualifications or training, without the sanction of the rules (not laws alone) as administered by three men chosen by one President of these United States?

The makers of a nation debarred from its avenues of livelihood, but by prescribed rules!

Ridiculous!

Was ever a trades-union more radical?

Do we need further illustration?

As a nation we must be governed by laws—just laws. Each individual and interest must receive his and its full share of benefit and protection, but when we fly in the face of all precedent and retard the advancement of business and the brotherhood of man we must needs be prepared to meet a contest.

The "closed shop" is a principle with our vast work-a-day people, because it is the ameliorator. The statute laws do not give the needed relief and assistance, nor guarantee the beneficent results worked out by organized labor through the grand business principles as developed by the "closed shop."

THE WORKING MAN.

The workingman is one big fool. Yea, verily, saith the prophet, he is an ass and the sound of his braying is heard in the world.

He complaineth aloud at the hardness of his lot; nevertheless he still boweth his neck to the yoke.

He buildeth palaces for the rich, while he himself liveth in a hovel, and payeth rent.

Yes, very muchly and frequently doth he pay rent, as he can raise the price.

When he can no longer raise the price, he getteth a swift kick near the termination of the vertebrae and goeth suddenly out.

His wife and children are also driven forth to perish with hunger and cold.

Then goeth the workingman to the "charities," where are found the angels of mercy, who minister to the needs of the poor, at so much per minister and wax fat thereby.

He findeth the chief angel and straightway poureth his tale of woe into his sympathetic (?) ear.

The chief angel listeneth with an incredulous smile and giveth the poor man an order to the charity wood yard, where he splitteth two cords of wood, and getteth a ticket to a soup house as his reward.

Yet the workingman getteth no wisdom.

He remaineth an ass all the days of his life.

He diggeth in the bowels of the earth, and bringeth forth her treasures and layeth them down at the feet of his boss.

He also voteth to send his boss to Congress.

The boss maketh some laws to keep the workingman in slavery.

Yet the workingman taketh no tumble to himself.—Rev. W. T. Withrow, Kansas City, Kan.

THE LABOR MOVEMENT.

In a general way the history of the so-called labor movement can be said to have been made in the century just closed, although previous to that the need of organization and concerted effort had been felt by the toilers of the earth in their struggles for sustenance. But the time had not yet arrived for perfect or effective union, and the little that was accomplished to bring about better conditions was done by occasional uprisings of men driven desperate by their hardships. The first attempt of the laboring classes to assert what they deemed their peculiar rights was the organization of bodies known as guilds. Long before guilds of working people were formed, however, there had been guilds of merchants and of religionists. But craftsmen were not permitted to join these guilds.

It is asserted that the organized labor movement as it is known today was first started in Massachusetts, when, in September, 1832, a meeting of farmers and mechanics was held in the statehouse, Boston. This meeting was called to protest against the excessive hours of labor required daily of the mechanics and other manual workers

and against imprisonment for debt. The meeting was the result of considerable agitation and friction between capital and labor, which caused one writer of that day to remark: "The American laborers resist the continuation of this prevailing economic system which gives even to a single daring capitalist in any one of the trades the power of reducing the incomes of all persons engaged in it."

The first trade union, American at least, was organized on Jan. 21 1834, in the rooms of the common council of Boston. In March following, a constitution had been drafted and ratified, and then, imbued with a devotional spirit, the members of the union decided to hold religious services on July 4.

The labor movement spread throughout the manufacturing towns of Massachusetts, and, although it met with many rebuffs, refused to give up the ghost. Even the women workers became interested in it, and the first union strike on record occurred in Lowell, Mass., about 1840. It was a strike of factory girls against a reduction of wages, and one girl, 11 years old, was characterized as "ring-leader." These girls must have been not only progressive, but also possessed of their full share of brains, because they published a small newspaper called *The Offering*. Its motto was, "The worm of the earth may look up to the stars."

The first national central body of mechanics organized in this country was that of the blacksmiths and machinists, which was formed in 1859. In the same year the iron molders signified their intention of forming a national union and applied to the United States government for a charter, but their application was refused. The breaking out of the war of the rebellion did much to retard the labor movement in America, although in 1860 as many as twenty-five or thirty trades had formed national organizations. Four years later the first convention or congress of trades unions was held in Cincinnati, and similar meetings were held in New York, Philadelphia and Chicago. The result of these meetings of the labor unions was the beginning of the agitation for the eight-hour workday. About the same year the agitation for organization spread among the employees of the railroads, and the Brotherhood of Locomotive

Engineers, one of the most powerful and influential labor bodies of the world, was formed. Ten years later the Brotherhood of Locomotive Firemen was organized, and the movement then became general all along the line of the mechanical trades. It even reached the miners of the west, and so successfully did they accomplish the objects of organization that from 1875 to 1880 they kept the wages of manual labor in the mines at \$5 a day.

By this time other trades not only had their local unions in all the cities and larger towns of the country, but many of them had formed national organizations, including the cigarmakers and printers. The Knights of Labor, a national body, was also formed. This organization, which became a powerful one, was founded as an educational order by Uriah Stevens, but it became rather an aggressive labor organization and played a prominent part in a number of great strikes. At one time it is said to have reached a membership of nearly 1,000,000, but its power and influence waned largely through dissensions among its leaders, until now it has only a remnant of its former greatness. Since then the labor movement has grown apace, and other great organizations, some international in their scope, have come to the front, among them the American Federation of Labor, with a membership of 2,000,000 and with affiliated unions in all parts of the country. Business relations have also been formed with the great labor organizations of Europe, especially those of Great Britain, until to-day organized labor is no longer an experiment, but an established fact which enters into the life of the nation.

In no branch of industry has the labor movement spread more widely than among the employees of the great railroads. Almost every employee in one or the other of the mechanical departments of the railroads is a member of the union. There is not only the Brotherhood of Locomotive Engineers and the Brotherhood of Locomotive Firemen, but other railway organizations.—G. R. Kelly, in *New York Tribune*.

There are nearly 6,000,000 farms in the United States, the average size being 140 acres.

Dec. 1903

NEW ELECTRIC INCLINE RAILWAY

BY FRANK C. PERKINS, IN "ELECTRICITY."

THE summit of Mt. Beacon, near Fishkill Landing and Matteawan, N. Y., is reached by the Mt. Beacon Incline Railway, one of the steepest inclines in the world. This electric road is owned and operated by the Mt. Beacon-on-the-Hudson Association of which Mr. Jesse B. Pattee is president and treasurer; Samuel K. Phillips,

line is 2,200 feet and the vertical height is 1,200 feet while the average grade is 64 per cent. The cars operate at a speed of 500 feet per minute with a load of 10,000 lbs.

The accompanying illustration, Fig. 1, shows the power house which supplies the necessary current, and Fig. 2 shows the electric motors and cable winding apparatus,

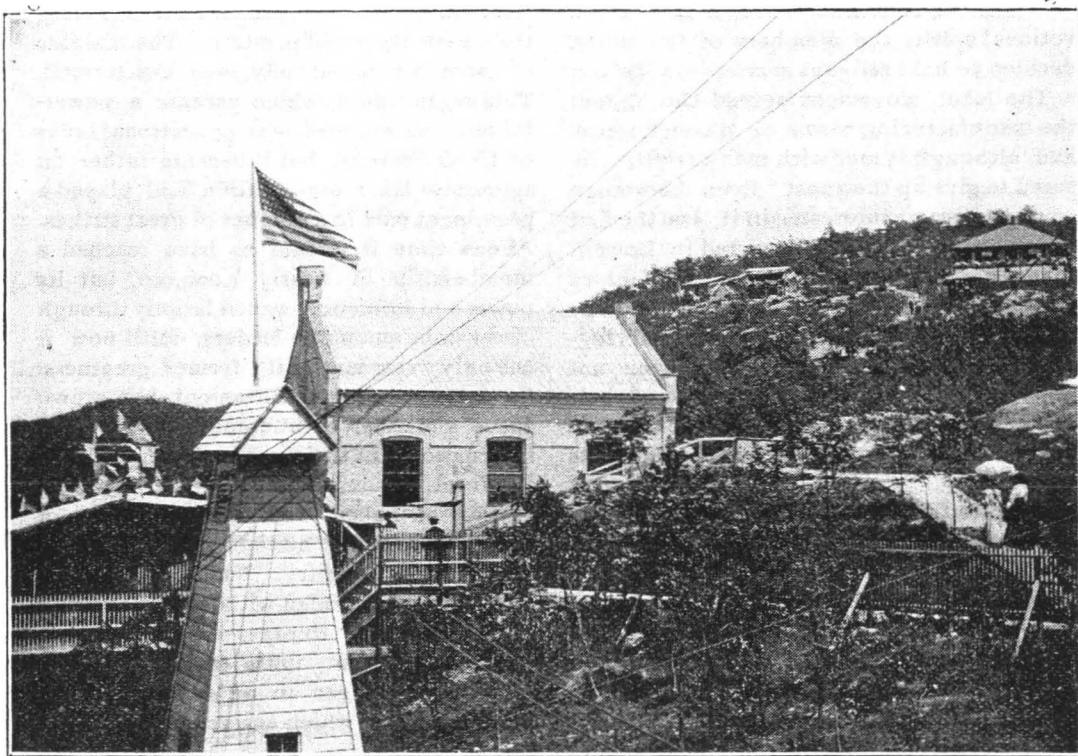


FIG. 1—POWER STATION AND TRANSFORMER AT HEAD OF INCLINE.

secretary, and Eugene S. Whitney, superintendent and general manager. It was opened to the general public in 1902 and carried 60,000 passengers the first season.

The road runs to the top of the west spur of Mt. Beacon, on the crest of which stands a monument erected by the Daughters of the Revolution to commemorate the burning of the beacon fires during the possession of New York by the British, to notify Washington and his officers of the movement of the enemy. The length of the

while the views from the top of the mountain as well as the stations above and below may be seen in Figs. 3 and 4. The steel cable used on this incline weighs 7,000 lbs. and measures 1 3/8 inches in diameter, its capacity being 124,000 lbs.

There are two motors having a capacity of 150 hp., each of the 75 hp. motors operating at the speed of 500 revolutions per minute. The current is received from the power line at a pressure of 500 volts, being supplied from a station about 6,000 feet distant.

Dec 1903

The two cars are each 33 feet long and 7 feet 6 inches in width, and are supplied with nine benches having a total seating capacity for 54 persons. The cars are equipped with electric signals, placing them in communication with the engine house as well as with each other at all times, and the apparatus is governed by the best electric control.

The track construction of this incline railroad consists of 6 inch by 10 inch stringers on mud sills averaging 6 inch centers, the

A safety device is also provided on the main winding drum, which will also stop the machinery in case of necessity. This is operated by a centrifugal governor and can also be operated at will by the operator in the power house. In addition to the above the incline is provided with electric limit stops, which are so arranged that the cars stop automatically and gradually at the upper and lower stations entirely independent of the operator. The cars are provided with powerful head-lights and are

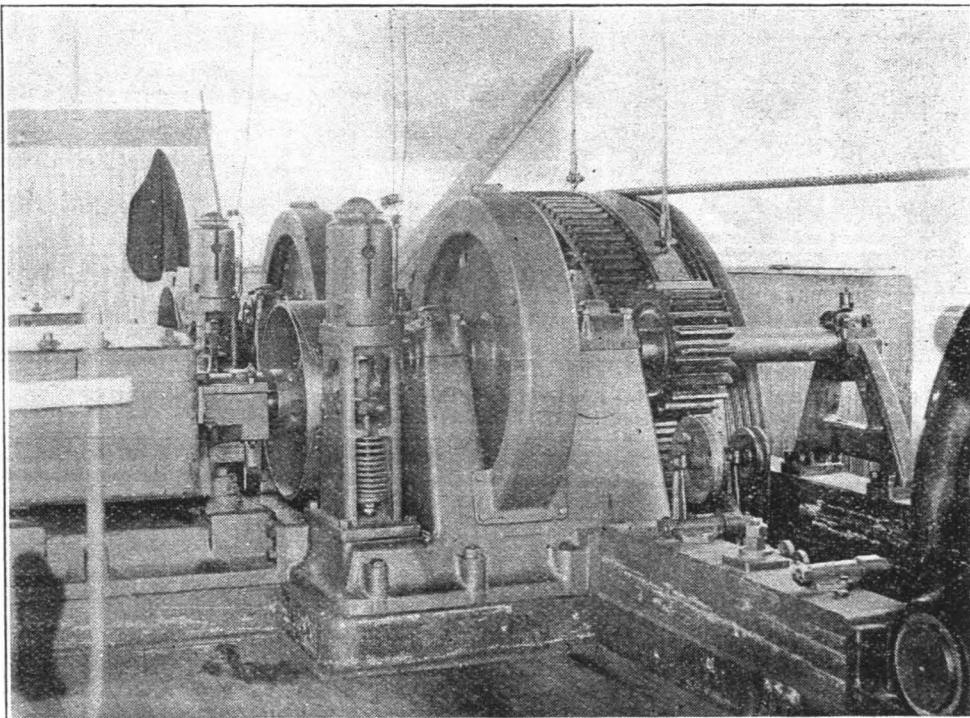


FIG. 2—ELECTRIC MOTORS AND CABLE WINDING APPARATUS.

ties being 6 inches by 6 inches yellow pine and the safety guard rails 6 inches by 8 inches yellow pine. The line is single track with turn out, the whole track being thoroughly ballasted with rock.

The cars are equipped with double grip safety device capable of holding 50,000 lbs. and this device is automatically operated by a centrifugal governor, which operates the safety should an excessive speed be attained from any cause whatever. The safety is also provided with a hand operating device, by means of which it can be operated by the conductor on the car at any time.

lighted by incandescent lamps while the entire track is also illuminated.

The cars are rigidly attached to the ends of the steel cable, which is driven by the 8 foot winding drum shown in the illustrations, after passing around an 8 foot idler, also within the power house and at a distance of about 12 feet from the driving drum. One of the wheels of the car has a double flange straddling the rail, and thus serving as a traction guide, while the wheel at the other end of the axle has a flat face, in order that the wheels of the car may pass over the cable at the ends of the turn out,

Dec. 1903

THE ELECTRICAL WORKER

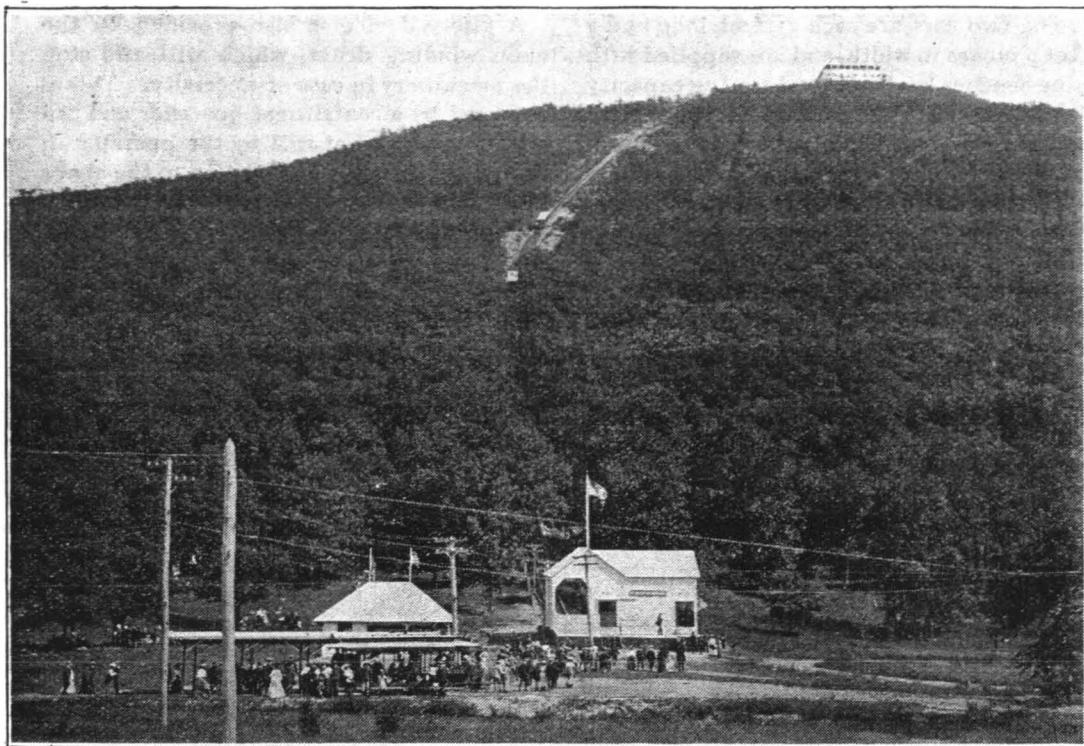


FIG. 3—VIEW OF INCLINE RAILWAY, WITH CAR PASSING AT TURNOUT.

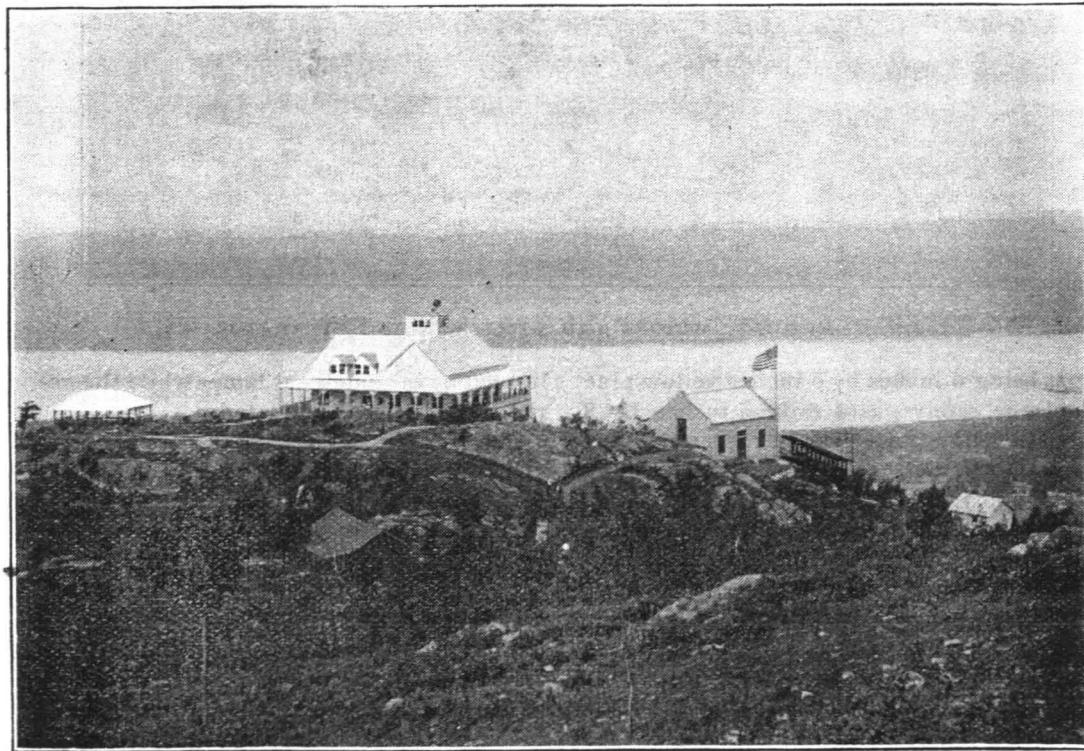


FIG. 4—CASINO AT TOP OF INCLINE.

and in addition to this emergency guides are provided consisting of steel projections from the car trucks. These projections pass over the guard rail on either side of the track without touching and they thus decrease the chance of derailment.

By means of the magnetic control system, in case the current is cut off or becomes too low to operate the machinery, or if there is an overload, either the underload or overload circuit breakers are opened, and the electric brakes are automatically applied to the cable driving machinery. In case the electric brakes fail to operate the mechanical brakes will be applied automatically by the centrifugal governor, the excessive speed setting the brakes and stopping the cars.

The speed of the car is not changed by the operator, who simply moves the controller for starting or stopping, and as the car nears the station a number of limit switches are opened and the current is thus gradually cut off as the car reaches the landing. The current passing through the circuit breaker starts the machinery, and is conducted through various circuits which control a series of magnetic accelerating switches.

When these switches are operated, the machinery is gradually accelerated, and the cars are brought to full speed, the action being entirely automatic, and not being under the control of the operator. In stopping the limit switches at the side of the track govern the operation of the magnetic accelerating switches, and the car is gradually brought to rest without the usual manipulation of the controller in ordinary railway practice.

The top of Mt. Beacon is laid out like a park with fountains, walks and summer houses, a large casino with halls, dining rooms and balconies being provided, as well as a roof observatory, which is supplied with powerful telescopes, and one of the largest searchlights manufactured. The searchlight has a 36 inch reflector, and is an important factor in the illuminating effects in the evening, bringing to view the Hudson with its many long lines of tow boats and brilliantly lighted night boats, with their crowds of tourists. From Mt. Beacon may be seen the Fishkill Landing, as well as the village of Matteawan, and the city of Newburgh in the distance.

PRESIDENT GOMPERS AT WORK.

There is a brick building just across from the Pension Department structure in Washington that has already become notable in the labor history of the United States, for it may be called the nerve center which actuates the movements of an army of 2,000,000 workers in America, whose names are on the rolls of organizations comprised in what is known as the American Federation of Labor.

Across the front of the building is a sign bearing the title in prominent letters, "Typographical Temple."

The visitor who calls to see President Gompers is ushered into one of the smallest departments—a little office in one of the rear corners. Here he is greeted by a man who, judged from his appearance, might be taken for a pastor of some village congregation or for a school teacher in an educational gathering. He also reminds one in his dress and appearance of a member of the bar.

From his manner a person would never think that Samuel Gompers for years wore the apron of a cigarmaker and with sleeves rolled up bent over his table in a tobacco factory. As already intimated, he has a scholarly bearing, but as soon as he begins to talk he displays an energy and decisiveness in conversation that are characteristic of the hustling merchant of to-day. And it may be said that these traits are contagious, for the Federation headquarters are truly a busy place from top to bottom, and the amount of work which is done is remarkable when one considers the force of employees and the limited facilities.

Mr. Gompers takes as much pride in showing anyone interested through the various departments as the head of a model factory in his various shops. But a step from his office is what might be called the correspondence room, where about thirty stenographers are sending out literally thousands of communications daily to various parts of the United States. Mr. Gompers' own correspondence is dictated to his personal secretary, and the letters which are prepared in this room bear the signatures of the general secretary-treasurer and other officers who are located in the building. On the other side of his private office is his

secretary's room, which also serves as an ante-room for callers waiting to see him. Beyond is the mailing department, where half a dozen clerks get out the numberless circulars, pamphlets, labels and other matter issued by the Federations. Hundreds of tons of literature are packed and addressed in this room annually, and its contribution to the post office material is by no means small. From this department the American Federationist, the organ of the Federation of Labor, is distributed, and from one year's end to another it forms one of the busiest sections of the building.

The front offices are devoted to the secretary and editorial rooms of the magazine. It is in the latter that Mr. Gompers transforms himself for a day or two in each week to an editor and for the time being gives up his other duties. While there is nothing luxurious about the sanctum it is equipped with things to save time and labor. One side is taken up with a well selected library.

Even the basement is utilized, the office of the treasurer and his assistants being located there, while the upper stories are devoted to apartments for committee meetings and store rooms. Altogether a force of fully 100 persons is required to keep the machinery of the the headquarters running, but it may be said that it moves as easily and with as little friction as the most up-to-date mechanism in the average factory.

The truth is, Mr. Gompers is an organizer in more ways than one. He is not only an expert in creating trade-unions, but in systematizing business, and the amount of work which is performed here by the employees would surprise many a merchant or manufacturer who prides himself on his own system.

Sometimes in a day a score or more of men prominent in labor circles are callers at headquarters. The Federation really represents no less than fourteen hundred unions, and their presidents, business agents and other officials are frequently obliged to come to Washington to have a personal conference with the head of the Federation.

Mr. Gompers believes that "in a wisdom," and is always open to suggestions from a member of any union, although the advisory council of the Federation is usually relied upon in considering the more import-

ant questions which come up. This body meets at certain regular intervals, but is frequently called together in special session to hear reports of organizers, to discuss labor difficulties which have sometimes arisen, or perhaps to hear grievances which have originated between organizations.

The board includes not only Mr. Gompers, but the six vice-presidents, secretary and treasurer. If the question concerns some special organization, such as iron and steel workers, railroad men or coal miners, the president and perhaps the general officers of the organization are summoned to Washington to confer with the council, and it may be said that no question of importance is ever decided until it has been thoroughly investigated and discussed.

Usually the meetings of the council are held in a little room which constitutes Mr. Gompers' office, and at a little table which nearly fills it have been planned many a movement of national importance, both to employer and employee.

It was here that the Federation, through its council, gave its approval to the strike of the coal miners after listening to the arguments of President Mitchell. Telegrams sent from it have more than once suspended operations in industries where thousands were employed, and have literally paralyzed traffic on railroad systems thousands of miles in extent. But it should be added that many a union leader has appeared before the council with a proposition for a strike which has been disapproved and a substitute adopted which satisfied both employer and employee without hardship to either.

Mr. Gompers is a hard as well as systematic worker, and many days in the year in this building he "puts in" more time than the Federation believes its members should labor, but his duties do not affect his disposition. He is a keen student of human nature and can quickly gauge the importance of his visitor's mission, usually before the latter has fully explained it. This enables him to transact such an amount of business in the comparatively limited time which he has.

Mr. Gompers has decided literary tastes, and the editing of the American Federationist is really one of his recreations. Another of his recreations, however, is photography. He is a camera enthusiast, and if

this subject is broached he will discuss it as eagerly as he would the question of organizing a new labor union. But he is not lacking in proper dignity, in spite of his cheeriness, and this is one trait which has given him his present popularity in the labor world, although his remarkable skill in what might be called labor diplomacy is perhaps his chief characteristic.—New York Herald.

FOR HIGHER DUES.

George W. Perkins, President of the Cigar Makers' International Union, writes:

While the union label is a powerful factor in the trade union effort to improve the economic well being of the working masses, I do not wish to be understood as saying that it is the beginning and end of the available means at the disposal of the trade union activity. I feel that I would be untrue to the cause of organized labor if I did not improve this opportunity to say that any union that depends entirely upon its label for success will prove a failure in the long run. Trade unions, to be entirely successful, must be founded upon a solid financial footing. The sooner this indisputable fact is realized and put into operation in all the unions the quicker will we be on the road to permanent success.

The trade union that is able to back up its just demands with a formidable reserve fund, with which to pay strike benefit, seldom has any serious strikes. Employers will more readily listen to such unions and more quickly grant their demands. This being true and proven beyond successful dispute by reliable statistics, it naturally follows that the unions which pay high dues are the cheapest in the long run. If a union with ample reserve fund has its demands granted without a strike, without loss of time, while the union with no funds has to lose four weeks or more to gain the same conditions, it is proof in itself that the high-dues union is the cheapest, and no one will say that it is not the most successful.

The union label is a silent, inexpensive, potent organizer for any trade where it can be conveniently used, and, when coupled with a high-dues and beneficial system, makes a combination that cannot be denied; and no combination, no matter how formidable, can defeat a union so equipped. The

union label in most trades stands, not only for unionism but for fair wages, short hours and generally improved conditions. On any article of consumption it means that the person who made the article was a fellow unionist, and as such deserving of the patronage of all real union men and women. The union article in some instances costs the dealer a little more than the non-union product, which is caused by the difference in wages; hence the selfish dealer has often raised the cry that the goods bearing the label are inferior, etc. This cry has been so persistently and diligently worked by those who are selfishly interested, that many are unconsciously led to believe that the statement is true. As a matter of fact, in all cases the union-label article is superior in quality and makeup to the non-union product.

The label sometimes appears on cheap goods and its presence there does not add to the quality of the goods. In this world we get just what we pay for. If we are willing to pay a fair price we get a fair article. No union man or woman should be influenced against the product of organized labor just because it is to the interest of the dealer. The usefulness of the general labor movement depends upon its strength and numbers. The stronger the label unions are made the greater the influence will they have on the well-being of all unions.

It is the duty, yes, the necessity, of all unionists to use all means to build up and strengthen the labor movement in all departments, and we know of no better means by which this can be done than to insist upon the union labels of all trades which have them. Every time we use an article not bearing the label we employ the "scab" that made it.

To my mind, the most potent factors which go to make a union strong and permanent are—first, high dues; second, a beneficial system; third, discipline—which can only be had where the first two are in operation, and fourth, a union label, where convenient to use.

Russia and France each furnish Great Britain annually more than 10,000,000 pounds of butter, while the United States furnishes \$1,250,000 worth.

HARD LUCK AND HARD SENSE.

One of the keenest politicians this country ever produced took a vacation and went to Europe. At the suggestion of friends whom he met in London he decided to secure the services of that useful functionary known as a "man," a combination of valet and companion. He reduced the applicants to one and was about to complete the negotiations when the fortunate person began to tell him of his career, his ambitions, opportunities and misfortunes—a genuine hard-luck story. The politician listened for a while and then suddenly interposed: "I find that I do not want you," and when pressed for his reason, added: "I never hire hard-luck people, especially the kind who talk about it."

There seems to be an injustice in this, and there doubtless is. At the same time this politician was a judge of men or he would not have been such a successful politician.

Most persons who have achieved success are obliged to listen to hard-luck stories despite their efforts to avoid them. The main reason the modern merchant or manager surrounds himself by an office guard, and protects himself by anterooms and swinging gates, is to escape callers who want to take up his time by narratives of their misfortunes.

Every large center of population has its army of hard-luck sufferers, and among them are men of education, men of position, men who are almost, but not quite strong enough to reach success.

Their point of view is out of compass; their bearings are wrong; their attitude is that some one who has succeeded must make amends for their own shortcomings. These unfortunates are probably the most hopeless persons in the world—hopeless not so much in their own ideas as in the possibilities of their reformation. When a man places his own inadequacy on ill luck he is not worth anything to anybody—even to himself.

Luck is the tide, nothing more. The strong man rows with it if it makes toward his port. He rows against it if it rows the other way. Fair or foul, flood or ebb, he rows. And the world has very little time to waste on the man who complains that the tide did not turn at every bend to suit his course.—Saturday Evening Post.

THE STRUCTURAL TRADES ALLIANCE.

At last an alliance of the primary trades in the building industry has been launched on the industrial seas.

For years the ardent hope of the building tradesmen has been for some sort of an entente that would keep each trade in its place, and that place open for each trade and its followers, but local friendships or lack of it has kept us apart until the galling yoke of duality or dismemberment has forced us to drop any trade jealousies or local sentiment that may have caused us to pucker at one another, and has brought us to a stern realization of the fact that "unless we hang together, we will hang separately."

Much has been said and written as to the advisability of forming a combination of purely building trades and the diversified opinions of the men engaged in the industry have caused us to hesitate, fearing the impossibility of welding into one solidified mass the multifarious branches or sub-divisions of trades now employed upon the building.

Then again, it was felt throughout that the cry of "duality" would be raised against us, and the charge would be iterated and reiterated that we were setting up in business for ourselves to cross swords with existing general bodies, and as we thought of these insinuations a chill ran down our backs and we plodded on the same old rut we had been following for years, losing our way at times in an endeavor to trace our course through the haze of specialities that is enveloping the modern building of to-day.

Moreover, it became more and more apparent each year that we were sinking deeper in the mire of trade dispute, with practically no relief being offered from encroachment by affiliated general bodies, since they were unable to understand the technical nature of our disputes, and at last we determined to try our hand at our own affairs, with the result that the country is face to face with a combination having a "community of interests" on the building, possessed of an intention to safeguard them at any cost.

A Structural Building Trade Alliance has been organized for the purpose of perpetuating the basic trades in their particular industry. By it no conflict with existing in-

stitution is aimed at—no antagonism to necessary authority is intended—but possessing as each integral part does certain indisputable rights, we guarantee with each other that proper regard shall be shown these rights and that we shall separately or collectively defend them whenever they are to be assailed and wherever we may be called upon.

In some quarters the new organization will be heralded as a movement looking to the destruction of present central bodies, and it may be difficult to disabuse this opinion from the minds of those who prefer to follow it. Indeed, it may even be unwise to attempt it, since a continued discussion will certainly detract from the main purpose of the alliance, which is avowedly to stand for the recognized trade rights of each other.

Plainly speaking, we mean that wherever the ramifications of the structural iron workers' trade shall lead, when boundary lines are submitted to and ratified by this alliance, he shall be privileged to follow them without objection; and what is true of the trade of the iron worker is also true of every other affiliated trade.

Nor is it the intention to make a war of aggression against existing trades or sub-trades upon the structure; on the contrary, we hope to continue in the friendly relations that have always been our main characteristic in the past.

We do insist, however, that we shall be consulted as to the proper and legitimate division of such departures and changes in existing primary trade as may be made in the future; but in this we feel a consciousness of performing a duty that we owe to our members in the several affiliated trades, since we are pledged to protect those who have devoted their lives to the trade they follow in elevating it to the highest possible standard and in making such personal sacrifice as their continued connection with their respective organizations demanded, instead of turning over to the industrial adventurer a ready-made trade or calling that he neither had a hand in making or developing.

In other words, we believe that the men following the basic trades are by right the natural heirs of such tributary trades as may be developed from time to time from the

main trades, and it is the purpose and aim of the new alliance to enter claim for future branches or divisions and defend each other in attempting to secure them.

Of no less importance is the intention of the new alliance to discourage and drive from its quarters dual unions in existing trades.

The trade union movement in this country will never be what it was intended until the last of the dual locals in every branch of industry has attacked and driven from its lair.

That any member of an organization can call himself a union man and stand for the continuance of a dual organization in any craft is inconceivable, and it is as much for the purpose of annihilating any that may remain that the basic trades in the building industry have banded themselves together and pledged to each other every support in killing the microbe known as the dual union.—Wm. J. Spencer in the Painters' Journal.

THE BOY'S ARGUMENT.

The office boy's union had adjourned from labor to luncheon, when the walking delegate, after examining the union label on a doughnut, asked: "Has youse kids seen de new calendars?"

"Ah, w'at yer givin' us now? Wese seen a hundred of 'em."

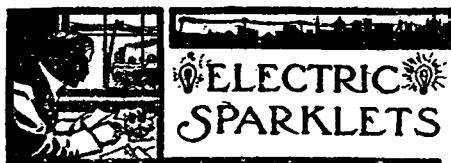
"Dat's all right; but has yer read 'em?"

A prolonged yell went up at the idea of reading a calendar.

"I tell yer dis year nineteen-t'ree is the bulliest year yet. Yese see dem red figgers wot shows de Sundays and der holledays—dis time dey comes in pairs. Dere's Washington's birthday—dat comes on Sunday, and we got two easy ones a runnin'. Den deys put five Sundays in March dis year. See? Decarashun day is a Saturday, and we gits two a-runnin'; der Fourt' er July is put down for a Saturday, and we skips de ranch for two days. Labor day is a Monday, makin' two again. Next Christmas comes on Friday, and sure dere's nuthin' doing for t'ree days, and de same wid New Year."

"Who makes de calendar?"

"Why, de printer, yer mutt. Don't yer see de union label? Dat's what organized labor is doin' for us poor workin' men."—Dry Goods Guide.



A German paper states, in referring to the high speed trials being made in that country, that the electric car ran a mile after the brakes were applied.

Dr. J. Wilson Swan, the inventor of the incandescent light, has just entered his 76th year. It is nearly a generation ago since Dr. Swan first publicly exhibited the electric light which has now become universal.

A German scientist, according to a report sent to the Department of Commerce and Labor at Washington, D. C., by Consul-General Guenther at Frankfort, has discovered a cheap and effective process of killing the microbes in milk by the use of electricity.

The validity of two patents granted to Nicola Tesla was under consideration before Judge Thompson of the United States District Court, in Cincinnati. He held that both patents were good. One is for the electrical transmission of power and the second is a method of operating a motor.

A young French savant is said to have succeeded, after four years' experiments, in not only soldering but brazing aluminum, which has hitherto proved impracticable. He has also discovered a process for hardening the metal and greatly increasing its powers of resistance without adding to its weight. He will shortly submit his discoveries to scientific experts.

A new automatic switch has been brought out in England, the object of which is to prevent a trolley car being left in darkness if the trolley pole comes off the wire or the main supply is interrupted from any cause. The ordinary lamps of the car are connected in series with a battery and an electromagnet device, by means of which the circuit containing the emergency lamps is held open. When the trolley is on the line, current flows through the ordinary lamps and charges the battery, returning to earth through the car wheels in the ordinary way. If the trolley comes off the line, the armature of the electromagnetic device is released and the emergency circuit is closed.

The electric pumping system that is about to be installed at the Rotterdam pumping station is the first of its sort ever used. Electricity has been used in nearly every possible sort of mechanical power, but Schenectady has the unique honor of being the first city to adopt it for municipal pumping purposes.

Lynn, Mass., reports that the General Electric Company has secured a contract from the New York Central Railroad for the equipment of the New York tunnel with electricity, involving about \$12,000,000. The contract calls for 30 electric locomotives, 10 steam turbines of 5,000 kilowatts each for generating purposes, and the equipment of the big power plant.

Steps are now being taken by the executive of the Dominion Rifle Association to introduce electrical power for the movement of targets at the Rockliffe rifle ranges at Ottawa, Canada. A scheme is being worked out by which it will be possible for the marker, by simply pressing a button, to raise and lower the target. In this way it is proposed to so lessen the work of the marker that his entire attention may be directed to the target.

Naval Designer Zopke, in reporting on the uses of the telephone at sea before the Ship building Technical Society of Berlin, Germany, exhibited a new stentorian microphone whereby a commander is able to give audible commands to the crews of six guns simultaneously. The instrument at the same time is susceptible to the faintest sounds, and experiments are being made in the detection of the approach of ships not yet visible by placing the instrument under the water.

The New York Central officials made public the running time of a freight train loaded with export cotton, which it was said holds the freight record between Montreal and New York. The train made the 435 miles between Valleyfield, Quebec, and New York in 16 hours and 20 minutes. Two hundred bales of Egyptian cotton were in store at Valleyfield, a few miles south of Montreal. They had been sold to Liverpool spinners and in order to make delivery it was necessary to get the cotton to New York within 17 hours. One of the railroad officials in speaking of this run said that it was significant in showing that the Canadian

rail and ocean service was wholly inadequate in cases of emergency when certainty of delivery is important. From this it was maintained that the trunk lines are in absolutely no danger of losing their prestige to the Grand Trunk or the Canadian Pacific.

It is reported that a trade agreement has been entered into between the General Electric Company, the Westinghouse Company and the Deutsche Allgemeine Elektrische Gesellschaft of Germany. This world wide electrical trust is said to have been brought about through the difficulty resulting from the introduction of American electrical appliances in Germany and the desire of the German manufacturer to take advantage of American patents. The trade agreement includes exchange of patent rights.

It is stated that Andrew Carnegie may spend \$1,500,000 on the new building that he proposes to erect for the five organizations of engineers that he hopes to center under one roof in New York City. It was also stated that the plans are being pushed ahead regardless of whether the American Society of Civil Engineers will endorse the project. The other national bodies—the Mining Engineers, the Engineers' Club and the American Institute of Electrical Engineers—will share in the building in any event.

Hugo Jone, a chemist in the city laboratory of Chicago, Ill., has devised an electric battery which he says produces more electricity from coal than the steam engine in connection with a dynamo. The battery is said to yield 40 to 50 per cent of the energy of the coal, whereas only 10 per cent of the coal's energy is obtained as power by means of the steam engine, the other 90 per cent being lost chiefly through friction. Mr. Jone expresses confidence that his battery will supplant the steam engine in railroad, factory and other uses. The inventor says that all metals and other substances used in his battery are "easily reducible and oxidizable as well, as a result of which the process in it, from a chemical point of view, are cycles in which the substances are recovered so that they can be used over again. The coal is the only substance used up." It is further asserted that the new battery would make it possible for ships to go five times as far without taking coal.

A South Bend, Indiana man claims to have invented a new elevated electric street railway and it is announced that a trial of it is to be made in that city. The plan is to have a single track supported on posts, the cars being suspended on hangers which run on this track. Some system of this kind that would remove the surface tracks and obviate all the danger of collision would add to the speed with which the cars could be operated and also to the comfort and safety of passengers. Its practicability remains to be demonstrated but the reason of the case is in its favor and all electric street railway lines may well be interested in the development of the idea.

The use of automatic cardcutting machines in connection with textile patterns has been much sought after in recent years, and there have been a large number of attempts to utilize electricity in the process. The ordinary process of cutting these cards in the piano machines, with foot power for driving the punches, takes a considerable time, and is none too accurate unless skilled operators are employed. An electrically operated machine has now been designed by an Austrian engineer named Zerkowitz, which operates as follows: The machine works on the principle which has often been tried before, but has previously failed due to troubles of practical nature. The design is painted on a metal surface with some non-conducting material, then a number of pins resting on the plate determine which of the punches shall operate. The actual details of the machine are not given, but it is claimed that it enables the design to be cut at the same time as the groundwork, and that the speed is at least ten times greater than by previous methods of card cutting.

According to the London Electrical Engineer, Mr. Marconi has returned from his cruise to Gibraltar on H. M. S. "Duncan," but his experiments do not seem to have turned out so successful as was anticipated. He was unable to hold communication with Poldhu, in Cornwall, from Gibraltar, although messages in the reverse direction are stated to have been received with ease by Mr. Marconi. The distance is over 1,000 miles. The reason that is given for the failure to transmit messages from Gibraltar to England is that the instruments used were not

sufficiently powerful. To this same cause has been attributed Mr. Marconi's inability to communicate with America from his Poldhu station, and he is supposed to be installing more powerful apparatus on this side. From reports received, Mr. Marconi is shortly to turn his attention to overland wireless telegraphy. His company is erecting a station at Fraserburgh, on the Aberdeenshire coast, and experiments will be carried out between that place and Cornwall.

Some successful experiments are reported to have been made on the part of the railway belonging to the Societa Veneta, near Padua, Italy, of an electric signaling system invented by an engineer named Beer, and especially designed for preventing collisions. Trains approaching each other on the same line perceive the signals warning them of danger in sufficient time to pull up. The experiments were watched by managers and engineers of different companies, and there were also present as interested spectators several foreign consuls from Venice. It is stated that the system is to be adopted by the Societa Veneta for use on all its lines. It is to be regretted that no details of the invention are given.

EDISON'S ROAD MOTOR.

According to the account which Mr. Thomas A. Edison gives out, he took a party of friends on a ride in his new motor carriage over the hill country of New Jersey the other day from Orange to Phillipsburg, at a speed of a mile a minute. This is highly encouraging of the success which Mr. Edison has been predicting for some time past for his storage battery and motor when they should be perfected. But we doubt that such a machine can be regarded as altogether a boon to the public. The hill-climbing quality is admirable, but no machine powered and geared to travel a mile a minute on our highways is wanted. In producing such a thing Mr. Edison would supply the means and the incentive for breaking the laws of every State in the Union.

The development of the traction power in road motors is very desirable for industrial and commercial purposes. A machine which, without too great expenditure for power, can take a heavy load up hill and down

over country roads would serve farmers vastly in getting their produce to market, and in cities would remove a great deal of difficulty and congestion of heavy teaming. What Mr. Edison ought to do is to invent a machine capable of doing this, but incapable of being driven above the rate of speed which is lawful. Thus would he be a public benefactor.—Boston Post.

THE QUICK AND THE DEAD.

The manager of a telephone company in Washington says that recently a prominent citizen of the capital entered his office, and with considerable show of irritation announced that one of the company's live wires had killed a tree on his premises.

"That tree," declared the citizen, "has been standing for thirty years, and I want to say to you, sir, that we look upon it as one of the family! My children, when they were babies, played under it, and associated with that tree are some of the happiest memories of my life. When that tree began to die, all of us mourned for it as we would for a relative. We could not imagine what was the matter with it until we noticed one of your confounded wires stretched across one of its branches. Your company has electrocuted my tree, sir, and I feel that it should be punished just as though it had done murder!"

The manager says that he felt considerably moved by the righteous indignation of his visitor; so he hastened to send an agent of the company to the scene of the tragedy, with a view to doing all that could be done in the matter. When the agent arrived at the gentleman's place he found that the tree was yet alive, but feeble. Further investigation on the part of the agent discovered the fact that one end of the wire was nailed to the roof of an old barn, and that the other end was twisted around a discarded pole. It had been cut off for at least two years, and forgotten. The agent was of a humorous turn of mind, and this was his report:

"I have to report that the wire complained of is dead, and that the tree is alive. It is evident that the wire was killed by the tree. Under the circumstances perhaps a bill of damages, such as I append hereto, should be sent to the complainant."

HOW TO QUICKLY WRECK A LABOR ORGANIZATION.

As soon as you elect officers begin to mistrust and find fault with them.

Make most of every little difference that occurs and blazon it abroad to the world.

If you can not have your own way, make sure that the union is going to the dogs.

Make much of the little mechanical rules by which the union is to work and keep in the background the real motive for its existence.

Always predict failure of any plan that is adopted.

When any scheme does fail, always remind the members that you said it would.

Always take the word of an enemy in preference to the word of a friend.

Always be ready to get your back up.

Remember your inalienable right to find fault.

Carry these rules out, and if your union does not fail it will not be your fault.

(This piece was prepared in New South Wales, and after being used with good effect in Australia, found its way here. There is a counterpart to the story which is headed, "How to Make it Succeed." The first rule says, "Stick to your union like a leech.")—Leather Workers' Journal.

WIRELESS TORPEDOES.

For some time past the Navy Department has been conducting with the utmost secrecy experiments which are expected to evolve something new and valuable in the way of torpedoes. The automobile torpedo, as represented by the Whitehead "fish" pattern, seems to have reached about the limit of its development, being in fact a miniature submarine boat, cigar-shaped, twelve feet long, carrying machinery, equipped with a propeller, and bearing on its nose a "war-head" filled with a high explosive. But the dirigible torpedo, which may be steered toward the target after its discharge, is yet in its infancy.

The problem seems likely to be worked out successfully through the medium of "wireless" control, and this is the task to which our naval experts have been devoting

much of their attention. It is requisite that the "sending station," from which the dirigible fish torpedo is controlled, shall be either on land or on a ship, and the officer in charge ought to be able to govern the movements of the agent of destruction for a distance of five or six miles. That this will be accomplished before long is confidently believed, and there seems to be good reason for thinking that the range may be increased to fifteen or even twenty miles.

The Marconi system is employed, and the apparatus is said to cost only one-third as much as the Whitehead. Discharged from the sending station, the torpedo, which has the shape of a fish, remains as much under the control of the operator as if directed by a wire. Ether waves do the work, and the machine, guided by the intelligence on shore or on shipboard, and propelled by a screw, speeds on its way toward the target, traveling beneath the surface of the water.

THE WELL-TRAINED MARK TWAIN.

Mark Twain has not yet occupied the house at Tarrytown which he purchased a year and a half ago—the one the astute village tax-collectors assessed at three times what he paid for it, but he runs up from Riverdale occasionally to look at it and see that no local Huck Finn has broken out the windows.

There were no cabs at the station one hot day recently when he arrived, so he essayed to walk up the Main Street hill. The Tarrytown hill is exceeded in steepness by the Newburgh hill alone. When half-way up he sat down on a carriage-block to rest, holding his hat in one hand. A street piano man struck up a tune in his immediate neighborhood, but the humorist sat unmoved. An elderly lady happening along conceived him to be the musician's helper, and dropped a penny in his hat. Mr. Twain rose and bowed solemnly, with a stately "Thank you." The lady took a backward step, apparently vaguely suspicious that she had made a mistake.

"Don't be frightened, Madam," went on Mark. "It's true the man doesn't keep a string on me, but I am well trained—very well trained—perfectly safe."



Curator Lucas, of the National Museum, who went to Newfoundland a couple of months ago to obtain a plaster cast of a whale has succeeded in his task. The cast is said to be the largest in the world, and when completed will be shipped to the museum. Later, it will be duplicated and a replica sent to the St. Louis Exposition. It is 79 feet long.

One of the remarkable features of the Exposition at St. Louis next year will be a 3,000-horsepower gas engine in action, exhibited by a Belgian company. This is the greatest power gas engine yet constructed. It will have two cylinders, each with a diameter of 51 inches, with a length of stroke of 55 inches, and the revolutions per minute to develop 3,000 horsepower will be 85. The engine is 67 feet in length.

A street has been paved with glass and the Paris newspapers are loud in praise of the innovation. Everybody who heard of the plan laughed at it before it was tried. It was argued that the surface would be too slippery for use and that it would be brittle and dangerous. In practice the pavement is found to afford an excellent foothold and it neither becomes dirty nor absorbs filth. The surface of the pavement is dull. All kinds of glass debris are used in its manufacture and the cost is low.

The corrosion of metals by sea water has been investigated by a German engineer named Diegel. Alloys of copper and nickel are not very rapidly corroded, and are rendered more immune by adjacent masses of copper alloys, iron and copper, these protectors being then more rapidly corroded. Copper-zinc alloys are corroded either by a uniform solution of the alloy from the surface, or, when the zinc exceeds 24 per cent, by a leaching out of the latter, but by the addition of 15 per cent of nickel this action is prevented. The corrosion of copper pipes in vessels is often very rapid, and occurs frequently at bronze joints, but the experiments show that a high amount of arsenic

(over 5 per cent) in the metal greatly retards the decay. When two pieces of iron differing in phosphorous contents were in metallic connection the sea water corroded the low phosphorous iron from two to five times as fast as the other. The normal corrosion of single plates of metal was low as the percentage of nickel increased, and when two plates differing in nickel contained were in contact the plate higher in nickel was almost completely protected from corrosion.

Waste paper is used as the basis of a new composition which is said to be harder than many kinds of stone. The secret is that of a Yonkers (N. Y.) man, who has given it the name of pollardite. As a thin veneer placed on iron, wood, stone or brick, it is said to offer protection against fire, water, acids or rust, resisting the effects of extremes of high and low temperatures. It is composed chiefly of waste paper, pulped and molded into form, and presents the appearance of a stone in color and consistency.

The owner of a good deposit of borax need not fear that his "well will run dry," according to the statement of one of the mining journals, which recently declared that borax deposits are practically inexhaustible. It is known that deposits thought to have been worked out have become materialized again in a short time, because of the continual expulsion of the alkaloid from the regions below the property. Heavy rains act upon the alkaloids and bring borax either in powdered or crystallized state to the surface.

The municipal gas works of Widnes, England, producing about 1,500,000 cubic feet per day sells its product at 32 to 24.3 cents per 1,000 cubic feet, which is claimed to be the cheapest illuminating gas sold anywhere in the world. The gas is maintained at 18 candlepower. It is sold at the lower figure for motive-power purposes. It has a calorific value of 670 B. T. U. At 24.3 cents per 1,000 cubic feet it is claimed to be cheaper than Mond gas at 6 cents per 1,000 cubic feet. With gas, such as is produced at Widnes, selling at 24.3 cents per 1,000 cubic feet, 5.5 brake horsepower are developed in a modern gas engine for 2 cents, or 0.36 cents per brake horsepower.

A comparison between the heating properties of acetylene and coal gas shows that the heat units developed per cubic foot are 1850 and 630, respectively, the temperature of the acetylene flame being about 2,600 degrees Fahrenheit. With an acetylene burner consuming two cubic feet of gas per hour a quart of water was brought to the boiling point in about eight and a half minutes. Under similar condition it required ten and a quarter minutes for the illuminating gas to accomplish the same results, though the burner used 16 cubic feet of gas per hour.

In a new German composition for coating or impregnating pasteboard and similar material for roofing and other purposes similar to our tar and felt papers a combination is also applicable for applying directly to the walls of buildings, and in a recipe recently given by our consul general at Coburg the following proportions are recommended: Colophony, 60 parts; neutral yolk, 25 parts, and 5 parts each of carnauba wax, linseed oil and magnesium oxychloride. The material under treatment is immersed for about ten minutes in the fused composition, and is then passed through heated rollers. Its value as nonconductor of heat and cold and its imperviousness to liquids render it a valuable addition to the list of building materials.

CO-OPERATIVE TELEPHONE COMPANY.

Editor Electrical Worker:

The above headline should put every brother thinking. Is there any reason why the brothers belonging to the I. B. E. W. could not form a co-operative company to build and own telephone and electric light plants? I think that a co-operative company would be a success in a good many ways if it were successfully managed; and it would benefit every brother that took stock in it.

The linemen or brothers of I. B. E. W. stand in a very peculiar position; in fact, they almost stand alone. When they go out on a strike they have to fight their battles alone and single handed against one of the biggest trusts in the country. They are not like the building crafts who make demands. When they make demands and they are not conceded then they can and do call a sym-

pathetic strike against their contractors. The lineman has no other trades that he can call out to help him to get his demands. So I will call to your minds that old adage, "If you don't help yourself no one else will help you." Although it is rather late in the day to talk about starting a co-operative company, yet it is better to be late than never. There is no reason why a company could not be formed, and it would be beneficial in a good many ways. We could establish a higher rate of wages for the lineman. In times of strikes we would be able to take care of a good many brothers if we had two or three plants to place brothers at; and this would, perhaps, be the means by which we would able to win out on the strike. Then there is another question that will confront the I. B. E. W. It will be only a few more years before we will have a large number of old and disabled linemen on our hands. Even now there are quite a number who are living upon the sympathy of their friends. We all know that when a lineman gets disabled or is too old to work that the trusts will not take care of him. It makes no difference to them how useful a man he has been or how long he has been employed as a lineman or an electrician by them, it is a rule with them to turn an old man out to make room for a younger man. Now, if we had several plants in operation we could find many a place that they could ably fill and we would be doing a world of good to these brothers, for they would again regain their independence and be in a position where they would be able to earn their own livelihood. They would not be dependent upon the sympathy of their friends in their old age. The I. B. E. W. has grown sturdy and strong, until at the present time we have about thirty thousand members. Now, out of all these members I think that over sixty per cent are single men. Now, what do they do with their salaries? Do they save it? From experience I know that there are very few linemen or electricians who save any money. If every member of the I. B. E. W. would take one dollar's worth of stock per month—that as the minimum—at that rate we would have \$360,000 in a year. That amount would build a telephone plant in a second class

city. There is many a man who could take from one dollar to fifteen dollars' worth of stock per month and never miss it; and he would be laying up a nice nest egg for his old age. He could not find a better investment for his money. We would be able to build better and cheaper plants than those that are in existence, and there is not a company operating that could compete with us in building plants. We could get the best and ablest men in the business to work and build our exchanges.

Now, brothers, I can not see any failure if we go about this the right way. I would like to see comments from some of the brothers through the Electrical Worker on on this question.

M. J. HAWKES.

Shreveport, La.

CHOOSE WHOM YOU WILL SERVE.

PAPER READ BEFORE LOCAL UNION 147 OF ANDERSON, IND.

"An individual is the representative of all the conditions by which he is evolved."

Then man is a slave, chained under the perpetual surveillance of his environments, and our boasted freedom becomes a delusion —one of the wiles of our masters to cheat us into self-complacency.

Prenatal conditions are integral parts of our being and has greater influence than those which environ us after birth. Prenatal conditions often mark the physical body of the child, and always mark the mentality of the child.

The essential conditions for the maintenance of an existence have been usurped by the aggregation of the surplus savings of past labor into capital and has robbed the masses of their opportunities and possibilities to reap the results of their labor. The means of labor are monopolized and it is compelled to give the lion's share for the privilege of activity. In the present complex civilization accumulated labor or capital stands opposed to present labor. All this brings about conditions that are far-reaching in their effect. So much is this the case that few are willing to take upon themselves paternal responsibilities. It is to this cause that we are confronted with the fact that ninety per cent of the births are not

wanted; and in seventy-five per cent every known means is resorted to to prevent them. Then if prenatal conditions are integral parts of our being, can we wonder that vice, immorality and debauchery stalk abroad upon the face of the earth? And that our asylums and prisons are filled to overflowing?

Shall we continue to allow ourselves to be rocked by our masters in the cradle of ignorance, listening to their lullaby songs of prosperity, while the little ones at home go half-fed and half-clad? Have we no right to demand better conditions for the unborn of humanity?

The acquisition of wealth is not governed by the laws of human well-being, as expressed by the higher morality, but instead has been monopolized from age to age by the most morally ignorant and vicious of the human race, but the artificial sorcery by which they impose upon mankind is on the decline. It has received its death wound; and though it may linger it will expire. Listen! You can hear its death groans now in the injunction law; in military rule; in the secular press.

Labor has the right to all it produces. "The rights of man are the rights of all generations of men and can not be monopolized by any."

But notwithstanding, we are confronted with a new organization, having the small sum of \$1,500,000 in its treasury, whose special purpose is to defeat organized labor wherever it may dare to demand justice, and they confidently expect large numbers of union men to join their organization for the express purpose that they may deaden their faculties, call their attention from the scene of activity and lead them softly to their sepulchre. They feel that unionists are arriving at knowledge faster than they wish, and thus their policy is the barometer of their fears.

In every case where men have dared to ask for a little more "bread and butter" or for a shorter day, that they might have an extra hour for improvement or recreation, they have been denounced as extortionists. But they can continue to practice extortion upon their laborers and expect to be looked up to as respectable business financiers.

O, justice, where art thou? Fellow la-

borer, wake up! To arms! The fight is on, and it is a fight to death. The time is at hand when you must decide which side you are on. Answer now to your own true self.

J. H. AMIG.

SELLS TOOLS OF DEATH.

State Electrician E. F. Davis, of Albany, N. Y., has consented to sell to the State for \$10,000 all right, title and interest in his electrical inventions used in the execution of condemned criminals, and will instruct an assistant in their workings, so that in the event of Davis' death or inability to carry out the mandates of the law the State will not be without an official executioner.

Superintendent C. V. Collins, of the State Prison Department, has designated Robert Elliott, electrician at Clinton prison, as assistant to electrician Davis, and Mr. Elliott received his first official lesson at the execution of Carmine Gaimari at Sing Sing Prison November 23. The electricians at Sing Sing and Auburn prisons have been designated by Superintendent Collins for instruction. They will attend executions only in their respective prisons, however, while Mr. Elliott will travel from place to place with Mr. Davis and assist at all future executions until his successor is designated.

The question of a successor to State Electrician Davis has long been a source of apprehension to Superintendent Collins and the wardens of the prisons where executions are carried out. Davis has made practically a life study of electricity, and has officiated at every execution since the law went into effect. When he took charge at the execution of William Kemmler, the first victim to die in the chair, at Auburn prison, on August 6, 1890, execution by electricity was entirely experimental, but from that time to the present Davis has killed over 70 persons, including Czolgosz, President McKinley's assassin; Mrs. Martha Place, and the three Van Wormer brothers.

Davis has taken out two patents for execution purposes. The chair never has been used, but the helmet and the leg electrode have been used by Davis for several years. He also has other apparatus, not patented, that he uses. He carries this apparatus with him in his little black grip from place

to place, and has jealously guarded his secret.

Realizing that the inability of Davis to officiate might leave the prison officers helpless in carrying out the law, Superintendent Collins for several years has been trying to purchase from Davis his secret. From time to time assistants have been appointed to work with Davis, with a view to educating them so that they could perform the duties, but none has ever reached the point where he was willing to take charge of an execution or could explain the construction or working of the apparatus Davis uses. Some left of their own accord, and others failed to qualify and were dismissed.

Two years ago Davis offered to sell the right to use the patents he used or may hereafter invent, to explain the working of the apparatus, and to instruct such assistants as might be designated for \$10,000. The legislature appropriated that amount, but the bill was so drafted that it called for the purchase outright of the patents and Davis refused to sell. Now, however, he has changed his mind and Superintendent Collins has closed the bargain. Davis will continue to apply the current as long as he is able, but the State hopes to have a competent man to do it when Davis decides to give up his task.

SILENT ELOQUENCE.

Elliott Flower, of Chicago, writer of verse and short stories, was on his way to his office one day recently when a friend in an automobile hailed him and invited him to have a ride.

"I can't do it," said Mr. Flower; "got to finish a story, and it 'll take all day."

"Oh, come on—finish your story to-morrow," pleaded the friend.

"I've got a little daughter at home about so high," answered Mr. Flower, holding his hand some three feet from the sidewalk, "and before she started for school this morning she came to me and stood on one foot, raised the other to about the level of her chin and turned her eyes solemnly on her shoe. She didn't say a word, and I didn't say a word, and even the shoe didn't make any oral remarks, but it was eloquent just the same. I'm going down to finish that story!"

Dec. 1903

UNDER THE POLES OF MANILA

BY "A TRAVELER."

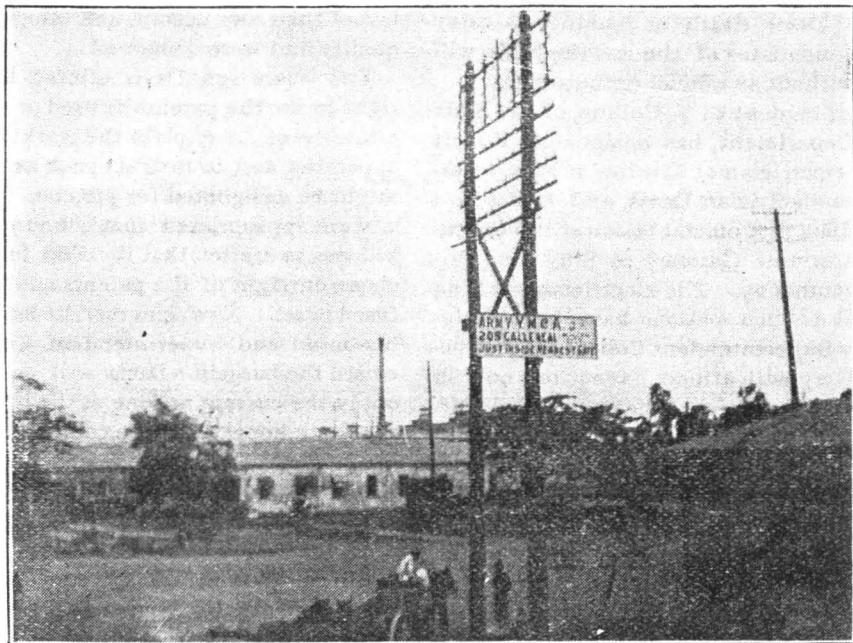
[Courtesy of "Electricity."]

HERE is hardly a city in the world in which circumstances similar to those in Manila have transpired in the past few years.

The writer recently devoted a week to looking into the electric lighting and tele-

but the bulk of the pole system of the Spanish type still remains. There are numerous wood poles of United States designing and these poles stand out prominently amid the overloaded, weak poles of the old system.

My first experience with the poles of the



DOUBLE POLE SYSTEM, MANILA.

graph pole systems that prevail here now and as they existed in years past. The poles of the Spaniards have been terribly overloaded, with wires which could scarcely stand the strain. Manila is noted for its numerous lines of wire extending from the center of the city over the walls in all directions.

The poles will be dealt with in this article for the reason that they differ in many respects from the ordinary telegraph or electrical power line pole. There are not very many iron poles in the city, although the American electricians and engineers have been introducing and substituting new modern patterns of metal poles for quite a while,

city of Manila was over a year ago, when I saw an army wagon, heavily and highly loaded, catch wires of the system and tear down poles. As may be imagined the system of wiring is extremely low. There are multitudes of wires packed upon these light Spanish and Filipino poles and it is a wonder that more of them do not fall. The poles are nearly all patched.

I noticed in nearly every instance the Spanish and Filipino poles were made of two pieces. The natives are sent into the jungles or hills to select straight, thin poles. They do not look for stalky timber.

They secure several hundred poles about thirty feet long and only four or five inches

in diameter. They take four of these poles and make them into one, that is, they put two poles together and bind them securely with telegraph wire or bolt them up. Then they interlock the two other poles to get the right length. Naturally it makes quite a patched affair, but the pole is rendered quite elastic and stands the typhoons well. The binding of the poles often breaks and this weakens the pole so that unless fixed it will fall. Upon these poles the linemen sometimes bank several tiers of wires which are considerable more than the mak-

natives frequently cut mahogany or similar hard wood, and receive for this work about 30 cents per day. Some of the great trees grow far in excess of the height of the longest poles required and almost perfectly straight, like a mast, from the roots to the cluster of limbs near the top. Often there are long intervals from the base of the trunk to the point near the tree top where the limbs begin to branch out. These tall, straight, limbless, hard-wood trees make excellent poles for the wiring system of the city. The little, weak built-up poles of the



POLES ALONG THE CANAL, MANILA.

ers of the poles ever calculated. Sometimes the weight alone seems sufficient to crush the poles, and breakages are frequent. All the lines of the city are freely provided with corpsmen, who make a business of inspecting and caring for the poles. As soon as a weak spot is noticed the corpsmen detail a number of natives to get to work to rectify things.

There are several fine species of wood in the islands from which the poles of the electrical and telegraph systems of the city are obtained. The cutting of the poles is usually under the direction of a government official or an army officer, generally a member of the engineer corps. These officers see to it that the natives cut proper sized poles. The

Spanish reign are being replaced by the new poles as fast as practicable.

Manila is much more liberally wired than is usually supposed. There are two or three companies engaged in furnishing electricity for lighting and for running motor fans, etc. Then there is the United States Signal Corps with its lines, the cable company and the island telegraph people. Later on when they commence to place the wires on the poles along the street car line to run the system by electrical power even more poles will be in view. As it is now, one sees clusters of poles bearing numerous wires in all the main streets, along the parks, at the bridges, in fact, all over.

The fire alarm system under the direction

1913

of Americans has been wonderfully developed and the wires for the alarm boxes extend all over the city. Many new poles were erected for these wires, but in a number of cases the existing poles were used, thereby adding to the strain on them. How-

the habit of putting two poles side by side, about six feet apart, with cross arms, often as many as eight, usually six. On these cross arms the wires were piled as close as possible.

I am informed from several sources of the demand for trained men in the electrical wiring and telegraphing line. Experienced linemen are also wanted to take charge of the native linemen. One must have patience to handle the natives. The latter do not believe in work, unless driven to it. They are accustomed to tying up things with strings and wires and "let it go" until it breaks down entirely. You have to stand over every man until he completes his work, otherwise he will not finish it right. The natives have a habit of quitting a piece of work just before it is finished. Pole holes are left



POLE NEAR THE BRIDGE OF SPAIN.

ever, the fire department, like the other departments using the poles, keep patrols out to examine the lines for weak points and remedy them.

The Spaniards very frequently made use of the double pole system. They were in



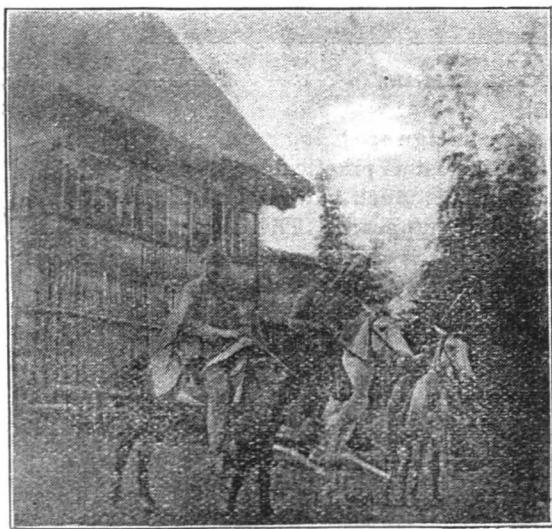
NATIVES SPLITTING BAMBOO FOR POLES.

partly filled. Cross arms are nailed on with the last arm poorly set. Wires are connected with one wire hanging after the connection is made, requiring only to be clipped off, and so on. It seems to be in their nature.

Frequently after a day's work they will forget and leave a tool or two behind.

American electricians as a rule join the signal corps of the army and get fairly good pay. Some engage in local enterprises.

Taking all in all there would seem to be quite a future for hustling electricians and telegraphers in Manila.



A SIGNAL CORPS PATROL.

THE FLY IN THE OINTMENT.

Sitting in Steinway hall, a few days ago, and listening to the speeches and talks of those engaged to address the fourth annual meeting of the National Civic Federation, it was impossible not to be struck with the remarkable transformation that has taken place in public opinion as to the social standing of the champion of workingmen's rights and organized labor. On the stage, in the audience, "respectability" elbowed the "labor leader" and the "walking delegate." And, truly, without a personal acquaintance it was often difficult to separate one from the other. For example, there were Gompers and Hanna side by side. Both passed middle life, both of rotund proportions, both gray-haired and becoming bald-headed. One represented the toiler in mine and workshop, the other stood for the rights, duties, privileges and obligations of the employer and the capitalist. Their faces were marked—even beautified—with lines that told of fierce conflicts in their respective worlds of action, of victories gathered, of defeats suffered, of stern purposes which had held them to their lines of action.

What was true of the scene upon the stage was also true of the appearance of the audience. The prosperous-looking, the evidently well-to-do, the wearer of the broad-cloth or the business suit made by the professional tailor were in evidence on the persons of the representatives of the wage-working classes as well as on those who were employers. And why should it not be so? Who has a better right to the best than those representing men and women to whose toil all are indebted for everything? When there is more of this equality in consuming the good things of this world there will be less of the cry of "overproduction."

All the world knows what these men said. The reason why this conference was held in Chicago, the hot-bed of unionism, was to get it talked about. The newspapers devoted columns to the "open" the "union" and the "closed" shop; more or less wise or witty editorials were penned about trade and labor combinations, the right to strike, the boycott, and the shorter workday; and, too, and opportunity was given the enemies of organized labor to turn a stream of misrepresentation and vituperation on every-

thing and everybody connected with the Civic Federation. But it all could have but one end—the focusing of the eyes of the public on a gathering as remarkable as it was epoch-making.

No one would have believed it possible a few years ago to ever see a manufacturer upon a public stage openly advocating the formation of labor unions, and the meeting of committees of employers and employees to settle labor grievances. Yet at this gathering that was the dominant keynote. The right was acknowledged of the workingman to set a price upon his labor, and it was shown to be the duty of the employer to either pay this or plainly prove to the workers that they had placed their figures too high for a competitive market. Those employers who refused to meet their employees in the settlement of grievances, real or imaginary, were properly castigated and held up to ridicule as unworthy captains of industry. And the positions taken by the Parrys and Baers as divine right employers and controllers of the opportunities for employment, were denounced, derided, and satirized.

And yet, after all, there was one thing lacking that prevented the meeting being the success of which it would otherwise have been entitled. There was too much commercialism, and too little humanity; too much of "making it pay" feeling, and too little of the spirit that animates the true reformer everywhere—the spirit that makes him do this or that because it is right. There was a hint of this spirit in Mr. Gompers' address. Here and there he touched a string that gave forth a true tone. But as a whole, commercialism—not right acting and right doing because it is right—was the ruling temper.

Here was the "fly in the ointment" at the fourth annual gathering of the National Civic Federation. If economic improvements, important as they may be, are to go no further than boards of conciliation, and arbitration, if the present relations of employer and employee must remain in *status quo*, it is time to agitate for the formation of an organization with a higher and still nobler purpose. The National Civic Federation is doing a good work, but it is not doing the best work. It is showing employ-

ers and employees some of their duties and obligations, however, and in this it is to be commended. Its intent is good, but, after all, its aim is not high—Judson Grenell.

THE EVOLUTION OF THE TELEPHONE.

BY HARRY S. COYLE.

The Buffalo Commercial Advertiser of 1876 describes a wonderful invention called Craughton's oral annunciator, which was at that time being installed for a local hotel. This instrument affords the direct means for oral communication between the office and each room in the hotel. It is operated by the breath and voice, a puff of breath through the speaking tube drops a shutter on the board in the office, which indicates the number of the room, the act of dropping the shutter rings a bell, which will continue to ring until the call is noticed. It is said that conversation can be readily carried on in a low tone or whisper through such an instrument for more than three hundred feet. This will not appear incredible in view of the fact that Prof. A. Graham Bell, of the Boston University, is now able, by means of his speaking telephone, to carry on, with perfect ease, conversation over a line established between his rooms in the university and the Cambridge Observatory, a distance of eight miles.

It would be a long, but a beautiful story to tell how, through a long course of evolution, the tubes of Craughton's annunciator were superseded by copper wire, and how a puff of breath was replaced by a current of electricity, and how the drop on Craughton's primitive switchboard, through a long course of inventions, was succeeded by the drop on the modern switchboard, and how the continuous ringing of a bell was superseded by the night alarm lamp, the supervisory systems, the buzzer and many other devices for attracting attention.

Let us return for a few moments to the cradle of humanity. Every invention of any importance is the nursery of future inventions, the cradle of a sleeping Hercules.

Only now and then the angry sky was lighted for the primitive man by electricity, and even then it filled him with terror. But it was he that invented the apparatus for conjuring from dry wood by a rude sort of dynamo the Promethean spark.

In the time of which we are now writing communication at a distance was carried on by a series of signal fires, and a marvelous code of signs. The way from the camp fire signals to the modern method of communication is long, but all the steps of that way have been taken in the endeavor of mankind to secure greater happiness and comfort.

How many test coils, transmitters, receivers, relays, etc., were devised! How many that were good yesterday are superseded by those that are better to-day! It is the survival of the fittest by human selection. Invention has struggled with invention for existence through human agency, and the many have been sacrificed that the few—the best—might remain as monuments of glory to the inventor. Through all the course of human history man has sought to communicate with his distant brother, so he invents camp fire signals, he sends rockets into the night, and many and wonderful are the methods that he devises to accomplish his desires.

The early forms of telephone apparatus are very simple. One of the earliest inventions was the following: A crude receiver is placed in circuit with a battery and two pencils of carbon are placed point to point. When the resistance of the current is varied by pressing the points of the carbon together a harsh, grating sound is heard in the receiver. The microphone is an instrument for augmenting small sounds; one of the simplest forms of microphone consists of a piece of charcoal held between two pieces of carbon, and in such a manner as to be affected by the slightest vibrations carried to it by the air or any other medium. The external pieces being put into circuit with a battery, and a receiver held at the ear, "the sound caused by a fly walking on the wooden support of the microphone appear as loud as the tramp of a horse." Through a long course of inventions the modern receiver and transmitter were evolved out of the simple inventions described above. So the old grows into the new by the survival of the fittest.

The one endowment that early man possessed, having in it the promise and potency of all future achievements, was the creative spark called invention.

We learn from the records of the ages that there never was a time when man was not

an inventor—never a time when he had not some sort of patent on his inventions. All inventions had their origin in the cradle-land, and in the infancy of our race. What we enjoy is only the full-bloom flower, the perfect fruit of which they possessed the germ. Many years ago men sat down and with great pains and sorrow discovered the principles which make our telephone a possibility.

It was a struggle through aeons of time by which the forces of destruction became a beneficent agent in civilization. How terrible is the lightning stroke! In its history how many limbs has it rent asunder, how many groans of agony have gone up to Heaven, how many shrieks of terror have rent the air! Is it not strange that the genius of man has transformed the very lightning of destruction into a messenger of love and joy? So the good grows out of evil, and the force of destruction carries messages of tender love and joy, messages of sorrow, and messages about everything in life, and the speech of man trembles over a net of wire in every city in the land. From the dawn of human culture in savagery to the midday of culture in civilization human genius has been producing many inventions for many purposes, and the good have given place to the better, and the better have yielded to the best. The problems of the telephone are not all solved, though savage inventors and barbaric inventors and civilized inventors in all lands and in all times have sought to produce the best invention. And so inventions have been changing—old inventions have died out and new inventions have been born, and inventions have struggled for existence as man has endeavored to learn; and with man forever the struggle to know has been the endeavor to secure happiness, for truth is good and wisdom is joy.

THE MORE UNIONISM THE FEWER STRIKES.

As long as one individual is allowed to hire another individual, and make a profit from their labor, there will, of course, be strikes and labor troubles.

Even under a system of public ownership of the means of production, there would be an occasional strike, and possibly a great many.

But the last thirty years have proved one fact plainly—the strongest unions have the fewest strikes.

No one suffers so much from a strike as the strikers themselves, and therefore it is the duty of the business agent to prevent strikes by interviewing employers and submitting differences to arbitration. The most successful business agent is he who obtains better conditions for the members of his union without the necessity of a strike.

The right to strike is as essential as the right to free speech or suffrage. "Thank God," said Abraham Lincoln, "we have a system of labor where there can be a strike. Whatever the pressure, there is a point where the workingman may stop."

The man who is too submissive to strike, who, when his pay is reduced or his work increased, will sit down and wipe his eyes and say, "Let well enough alone," and "Thank God, it's no worse," is not fit to live in a republic. He should emigrate to Siam or Thibet, or some country which has not been liberated by the courage and devotion of a host of patriots.

But there is no more connection between a strike and a strike-riot than there is between a river and a drowning accident. We do not want the river drained dry because some unskilled boatman has met with a mishap. And the incalculable national benefit that has been derived from unions and strikes dwarfs the few occasional breakages and broken heads into insignificance.

No union leader ever advocates violence. If he did he could be held responsible for every brick thrown by a newsboy. And in the arrest of rioters made during a strike it is seldom that a union man is convicted. There is more rioting every year by college students than by trade unionists.

The representatives of the law have often been the first and most serious law breakers during the progress of a strike. This was notably the case at Albany, where the militia shot dead two well-known citizens during the street car strike; and at Hazelton, where the sheriff and a gang of picked-up ruffians shot and killed twenty-four unarmed coal miners. In neither case did the workers retaliate, nor did the law punish the criminals.

The best way to prevent a strike is to get every last man in the trade into the union, to hammer the principles of trade unionism into their heads, to get a half million dollars into the treasury and to elect the most level-headed men as the officers of the union.—Minnesota Union Advocate.

AN OLD FASHIONED WOMAN.

No clever, brilliant thinker, she,
With college record and degree;
She has not know the path of fame,
The world has never heard her name;
The walks in old long-trodden ways,
The valleys of the yesterdays.

Home is her kingdom, love is her dower—
She seeks no other wand of power
To make home sweet, bring heaven near,
To win a smile and wipe a tear,
And do her duty day by day
In her own quiet place and way.

Around her childish hearts are twined,
As round some revered saint enshrined,
And following hers the childish feet,
Are led to ideals true and sweet,
And find all purity and good
In her divinest motherhood.

She keeps her faith unshadowed still—
God rules the world in good and ill;
Men in her creed are brave and true,
And women pure as pearls of dew,
And life for her is high and grand,
By work and glad endeavor spanned.

This sad old earth's a brighter place,
All for the sunshine of her face;
Her very smile a blessing throws,
And hearts are happier where she goes,
A gentle, clear-eyed messenger,
To whisper love—thank God for her!

HABIT BETTER THAN LAWS.

If instead of enacting any more laws for the purpose of making us pay our debts we should get into the habit of simply paying them, and considering it immoral not to pay them, the practice of promptly paying just claims might presently become as nearly universal as is the practice of "tipping" negro waiters and sleeping car porters. Neither statutory law nor conscience compels us to give tips, but custom does—and

we do it. We have made violations of the moral law illegal by statutory enactments; it might now be well to make them disgraceful also by stimulating the public conscience. And if, while we are teaching ourselves to be honest for the love of honesty, we should have any time to devote to politicians and their laws, we might spend it by weeping at the spectacle of a legislature trying by laws of its own enactment to prevent itself from accepting bribes.—Lonely Man.

THE HORN OF THE BANISHED.

Peter Newell, the artist, has a young son who has served to keep the family from falling into a state of lethargy. The other day the new minister of the church, in whose Sunday school Mr. Newell is interested, was due to call, and Mr. Newell said to his wife;

"My dear, I wish you would send that hopeful of ours upstairs while the parson is here."

A proclamation of banishment was accordingly issued. The minister arrived and took his seat on a sofa. Things went on smoothly for ten minutes and the caller had just outlined his views on the needs of the Sunday-school when a pause followed. Suddenly there came from under the sofa a terrific blast of a tin horn. The good man sprang up in alarm, and Mr. Newell dived down with the intention of pulling his son out and making an example of him. All he found was an election-night horn, over the mouth-piece of which was stretched one end of a long piece of rubber tubing leading suspiciously into the stair alcove and upward.

"Never mind," said the minister, resuming his seat; "your son seems to be right in line with modern inventors; the horseless carriage—the wireless telegraph—the boyless horn."

THE HUMAN RACE.

A child of nine should weigh sixty pounds.

The average weight of the negro brain is four ounces less than the white.

The average for men to marry is highest in Sweden, thirty-one years, and lowest in

the United States, twenty-six and one-half years.

Deaths from consumption are divided by ages as follows: Under forty-five, 59 per cent; forty-five to sixty, 29 per cent; above sixty, 12 per cent.

Records prove that the college man at thirty is far in advance of the man of the same age who entered by the apprentice door. Even at thirty it is shown that the four years spent at college were not wasted, and that he really acquired the ability to learn how to do things.

NOTES.

The first step toward being wise is to know that you are ignorant.

This instant is thine, the next is in the womb of futurity, and you know not what it may bring forth.

Mix kindness with reproof and reason with authority.

The heart of the envious man is gall and bitterness. The success of his neighbor breaketh his rest.

As the ostrich when pursued hideth his head and forgeteth his body, so the fears of the coward expose him to danger.

Choose your friends as a doctor would prescribe medicine, to give what you lack. Some people act as a sedative, others a stimulant.

Don't expect too much from the man who is always spreading the wholesome bread of truth with the butter of policy.

One night of foolish carousal may destroy the results of a year's intelligent labor.

Let us never forget that victory by the sacrifice of principle means defeat.

Diligence is the mother of good luck.

You are busy fooling others, others are fooling you. It's a waste of time. A straightforward course would be better for everybody.

Under some conditions a man can make more noise in the world by keeping his mouth shut than in any other way.

Mend your own faults, let other people's alone. Let others develop their individuality in their own way. Don't meddle. Mind your own business.

ACHIEVEMENT.

Not in the rush and riot
The hardest fight is fought;
Not out of stress and bustle
The greatest work is wrought.

'Tis not the roar of battle
That tries the soldier's breast;
The pause before the volley—
That is the soldier's test.

The crane amidst the foundry
With noiseless movement runs,
And without voice or trumpet
It lifts aloft its tons.

The bridge that with its girders
The mighty gorge has spanned
Was by the chief and draughtsman
Within an office planned.

A hundred may be gleaners
Where one has sown the seed;
If idle were the thinker,
Undone would be the deed.

EDWIN L. SABIN.

HE OBEYED INSTRUCTIONS.

A prominent racing man tells the following story:

His jockey fell ill on the eve of an important race and left him without a rider for the horse which he had entered for the event. In looking about for a substitute he decided that his stable boy, who was thoroughly familiar with Spitfire's ways, would fill the bill very acceptably.

"Now, you must be very careful," he warned him, "to use Arizona as a pacer; he is a wonder, and will lead the track; follow him closely until just before the finish—don't pass him under any circumstances until you get within a few lengths of the line; then let Spitfire out for all you are worth."

The capitalist paused in his recital and turned the cigar meditatively in his fingers.

"Well did he obey your instructions?" asked one of his listeners.

"Yes," answered the owner, "to the letter. He kept just behind Arizona until they were almost at the finish line, and then he spurted ahead in great shape, but, unfortunately, there were four horses ahead of Arizona.

WORKSHOP AND LABORATORY.

The average journey of a ton of freight is 128 miles.

Wireless communication has been established between Japan and Formosa.

The paper bills of the United States printing office amount to \$750,000 a year.

The capital of the railroads is more than five times as great as that of all the banks.

More than one-third of the inmates of the Elmira, N. Y., State's prison are well educated.

The balance of trade in our favor nearly equals, and occasionally exceeds, that of all other favored nations on the map.

The cost of electric current for lighting purposes in Berlin will be reduced to 40 pfennigs (10 cents) per kilowatt hour.

The average wealth for the general population of the United States is \$1,236; that of the Osage Indians is \$11,500 per capita.

Fifty thousand German toymakers export \$13,000,000 worth of toys, of which the United States gets nearly \$4,000,000 worth.

The statistics for insurance against sickness in Hungary show that the number of insured increased from 635,350 to 637,343 in 1901.

The hottest place on earth is Bohreim, on an island in the Persian Gulf, which has a mean annual temperature of 99 degrees.

During the Middle Ages gunpowder, clocks, telescopes, parchment, paper, and the mariner's compass were invented or adopted.

In the interest of the increase in population, a Frenchman suggests that married men and fathers be exempted from military duty.

Something like three-fourths of the annual expenditure of the Turkish government has of recent years been for arms and munitions of war.

The State board of health of Indiana has issued orders forbidding the re-employment of 250 teachers in the public schools who are afflicted with tuberculosis.

The total cotton crop of the world is 13,000,000 bales of 500 pounds each, of which the United States furnishes 11,000,000, and all other countries 2,000,000 bales.

During the South African campaign the British soldiers discovered that cordite, used to charge cartridges, contained intoxicants, viz., nitroglycerin, guncotton, and vaseline.

Mr. Chamberlain's organization has already circulated more than 16,000,000 pamphlets setting forth its views as to protective tariffs, and the Free Trade Union has issued 14,000,000.

Only 12 per cent of the deaths from apoplexy, softening of the brain, and paralysis occur under forty-five years; 33 per cent occur between forty-five and sixty; 55 per cent occur above sixty.

The leading features of the Steltje's type-printing telegraph are that no batteries are required, no expert telegraphists needed, and the message is printed automatically at both ends of the lines.

The largest single engine used at the St. Louis Exposition will be an 8,000-horse-power steam-turbine, the largest yet in use. The largest steam engine in the Paris Exposition was 4,000-horsepower.

Sleeping car service has been inaugurated on the electric lines between Columbus, Ohio, and Indianapolis, Ind. The cars are complete sleeping cars, and are equipped with 600-horsepower motors.

There are to-day 5,000,000 day laborers in this country. One and one-fourth million belong to national trade unions, another million to trade unions not yet national in their scope, and the remainder comprise the army of unorganized labor.

The first locomotives weighed from three to five tons. An imported English locomotive, weighing ten tons, was too heavy. Twenty-five engines of that day would make one of to-day. Fifty years ago a train load of 200 tons was heavy. Now loads of 2,000 to 2,500 tons are handled.

A Norwegian chemist has discovered a new and cheap way of making alcohol from sawdust. Sawdust is treated under pressure with diluted sulphuric acid, by which the cellulose is transformed into sugar, which, by adding fermentation producers, is converted into alcohol in the old manner and then distilled. Two hundred and twenty pounds of sawdust yields fifteen pounds of alcohol.

A writer in *Nature* compares the exhalation from cedar wood and the magnetic supply from a magnet with the emanation from radium—each being without loss of substance. To this might be added the grain of musk, which fills a room with its odor for years without loss of weight.

An eight-inch pipe line has been constructed from the Bakersfield oil region 280 miles to San Francisco Bay by the Standard Oil Company. The oil is so thick that it has to be heated every twenty-seven miles as it travels. The line is covered with asbestos and delivers 20,000 barrels a day.

In an address before the British Association for the Advancement of Science, Mr. Charles Hawkin's remark that water obtained by gravitation is almost, if not quite, as expensive as water obtained by pumping, may be something of a surprise to a layman, but is easily explained by the greater cost of gravitation work.

The same methods which have been applied with such remarkable success of the training of boy apprentices in the industrial and commercial schools of the empire are now to be adopted for the education and training of girls who may seek to better their conditions in life. They will then swell the ranks of that trained army of experts which has accomplished more than any other one factor to make German commerce and industries what they are to-day.

Some of the problems which Dr. Simon Newcomb expects the twentieth century to solve are the minute corpuscles which exist around the millions of atoms, which, for example, make up a drop of water; the slight change of the magnet needle; the mystery "of the so-called new stars which blaze forth from time to time," the causes of these outbursts; the possible solution of earth problems from these and other phenomena, and the things that M. Curie's radium suggests.

Under the old age pension law of New Zealand, a person to draw a pension must be sixty-five years of age, and must have resided in New Zealand for the previous twenty-five years; must not have been imprisoned for a period of four months during the past twelve years for any offense punishable by imprisonment for one year, and must have led a sober and respectable life for the

previous five years. His yearly income must not exceed \$260, or his net capital \$1,350, and he must not have deprived himself of property or income to qualify for a pension. The full amount of the pension is \$90 per year, payable monthly.

Every newspaper having a press franchise contributes its share toward the expense of employing agents in the various cities, leasing telegraph wires, and paying telegraph and cable tolls, a fixed weekly charge being charged against it. Every such newspaper places its proofs at the disposal of the local agent of the press, who selects from them what he thinks will be of interest elsewhere, and sends it by telegraph to the nearest distributing center, usually New York or Chicago.

In the interest of preventing consumption in the boarding schools of France only metal bedsteads are permitted; every child older than twelve years must sleep in a room by itself, and in the kitchen and in the dining-room scientific precaution must be taken against the disease. And no pupil or teacher who is known to have consumption is permitted in any school. Circulars, prepared by physicians, are sent to every school principal, which explain in detail preventive measures of all kinds.

In *La Nature* is an interesting article on the influence of muscular energy in eliminating alcohol which has been introduced into the blood. M. Grehant made a series of experiments, dosing with alcohol, and then examining the blood after a varying number of hours. He found that under ordinary circumstances the elimination of alcohol was extremely slow. He then had constructed a wheel, three meters in diameter, into which a dog could be placed and kept moving. Alcohol was introduced into the stomach of the dog, and after five hours in the wheel its blood was examined, when it was found that the alcohol had diminished much more rapidly than when the animal was not exercising. M. Grehant commends the result of this experiment to the consideration of men who have somewhat overindulged, and suggests that experiment might show beneficial results from carriage riding when the degree of "ivresse" was two great for walking.

PRESENT DAY ADVANTAGES.

Editor Electrical Worker:

The young mechanic who thinks it is a harder task to take front rank in his trade at the present day than it was for his father to achieve excellence in the same pursuit in his time, should be reminded of the many advantages he enjoys, of which his father knew nothing. Even so short a time as a generation ago, in this country at least, there were no technical schools; text books on mechanical subjects were few; there were no mechanical papers published; a mechanical dictionary was an unheard of thing; large factories did not maintain circulating libraries for the benefit of their mechanics, and popular lectures on mechanical topics were not conspicuous features in all the large cities. Free night schools for instruction had not been thought of, and many other advantages which the young mechanic of today enjoys were then unknown. But a thing which the mechanics of forty or fifty years ago possessed, which in many cases is sadly lacking in the youth of the present day, was self-reliance.

Our boys have so many helps, and things are so generally prepared for them, both in the public schools and in other departments of our educational system, that they learn the habit of abject dependence, and fail to acquire the habit of asserting themselves and investigating upon their own account. This difference is to be ascribed in many cases to the failure of our young electrical workers to profit by the unusual opportunities which are opened around them.

W. E. ROSSETER.

Newark, N. J.

ELECTRIC RAILWAY POSSIBILITIES IN SOUTH AFRICA.

The following interesting discussion of the possibilities of electrical operations of railways in South Africa is taken from the report of Mr. Hoy, the chief traffic manager of the Central South African railways:

"The success with which heavy locomotive engines are now being employed in these colonies, as well as in England, points to the maximum having nearly, if not actually been reached. A 120-ton locomotive upon an eighty-pound rail, on a three-foot six-inch gauge, is what would generally be

considered a favorable result. If the locomotive limit has been attained, there are evidences of developments in substituting a newer motive power upon lines where the nature of the traffic to be conveyed renders it possible to utilize electrical or other systems of energy. The employment of the heavy locomotive has its unquestioned economic merits, but it is an important consideration whether freight vehicles may not with advantage be equipped with their own motive power; either for individual or collective haulage. The grade will always largely influence the value of the locomotive, but upon sections admirably adapted for the use of electricity, the adhesive power may with advantage be abandoned for the energy attached to the vehicle itself, and thus overcome the resistance common to the present system of haulage. Whether the power to be employed be electricity or a combination of other forces, there can no longer be any doubts, that upon short and busy lines steam can be superseded. If any section of railway in South Africa lends itself for advancement in this direction, the Springs-Randfontein length offers an admirable opportunity for the expansion of such scientific energy. The working of so many mines sidings might assure the success of a change in working. There is a further guarantee of sufficient traffic within the section. I assume that electricity will supersede steam for passenger work along what is known as the Rand tram section within a measurable space of time. There are excellent opportunities for installing electricity, and of taking early steps, not only to cultivate the suburban traffic, but to retain it."

THE TELEPHONE ON FARMS.

Farmers are getting rural free delivery with its opportunities for saving time and money in shopping; in the more thickly settled portions of the country they have rapid transit by trolley lines, and in some parts, notably in the west, they enjoy the advantages in business and farm operations of extensive telephone system.

Far removed from the daily paper, with its weather forecasts, the farmer can keep informed by the 'phone of possibilities, and thus escape loss in crop time. When he

Dec. 1913

himself, is away from home the members of his family have a telephone at hand, giving them the means of quick communication with neighbors, as great a protection against prowlers as the possession of a shotgun or a revolver. The telephone on the farm is a cultivator of neighborliness, a saver of time and trouble, and a protector of the home.

SOME SIMPLE ELECTRICAL EXPLANATIONS.

BY CHAS. H. COAR, LOCAL NO. 24.

The average electrical worker is often confused when asked to explain the laws and principles governing electricity, for want of a simple explanation.

Questions are usually asked by persons whose knowledge of electricity is very lim-

ited, and it is a difficult problem to give this class an explanation that will be understood.

example, let us take a pipe with a quarter-inch hole and force a gallon of water through it. Now, let us force a gallon through the same length of pipe with a sixteenth-inch hole. It can be seen easily that it would take four times as long for the gallon to flow through the sixteenth inch pipe as it would through the quarter-inch if we were to allow the flow in both cases due to gravitation.

Or, by using pressure it would require four times as much to force the gallon through the sixteenth-inch pipe as it would through the quarter inch in the same length of time.

We find thus, by enlarging the outlet in the pipe that the resistance decreases; so it is in electricity—all conditions the same, a large wire is proportionate in resistance to a small wire in a like manner.

A volt is the unit of pressure. By using the some explanation and referring back we find that it takes four times the amount of pressure to force a gallon through the smaller pipe as it did through the large one. Therefore, it will take four times the number of volts to force a current through a small wire than through one four times as large. We can now see how ohms and volts bear relation to each other.

An ampere is the unit of quantity or amount of current. The amperage is similar to a quantity of water.

Let the pipe with the quarter-inch hole be now known as a wire a quarter inch in diameter and the sixteenth inch pipe a wire a sixteenth inch in diameter.

We find that it will take a greater number of volts to get the same number of amperes across the small wire comparative to the large one.

Thus Ohm's law stands :

$$R = \frac{E}{C} - E = C \times R \text{ and } C = \frac{E}{R}$$

in which R stands for resistance in ohms; E for pressure in volts, and C for currents in amperes.

In a given resistance an increase of voltage must be accompanied by a proportional increase in amperage; or an increase of amperage must be accompanied by a proportional increase in voltage, but an increase in ohms will be accompanied by a proportional decrease in voltage or a proportional decrease of amperage, and a decrease in ohms will be accompanied by a proportional de-



CHAS. H. COAR, LOCAL NO. 24.

ited, and it is a difficult problem to give this class an explanation that will be understood.

The purpose of this article is to furnish explanations for a few laws and terms without entering into any explanation of the causes or different effects produced by electric currents.

In explanation of the terms used in Ohm's law, a comparison to hydraulics forms a very convenient method.

One ohm is the unit of resistance. For

crease in voltage or a proportional increase in amperage. Thus it will be seen that amperage and ohmage limit and define each other, where the voltage is a fixed quantity.

Other terms, such as pulsating, alternating, cycle and phase are confusing to some.

Pulsating current: A pulsating current is a direct current interrupted. In the primary circuit of a medical coil operated by a battery we have an illustration of a pulsating current, when the vibrator is in operation.

Alternating current: An alternating current rises from zero to a maximum in one direction, and then drops back to zero and repeats the operation in the opposite direction. The simplest form of an alternating generator is found in connection with magnetic bells used on telephones.

A cycle: When an alternating current passes from its maximum strength in one direction to the same strength in the opposite direction it accomplishes one alternation; then it passes through another alternation in returning to the condition it was at the beginning. When it has done this a complete cycle has been performed. The frequency of an alternating current when given in cycles is always the number of cycles per second. Thus the current in a 60 cycle machine, or circuit, passes through 60 cycles per second, and is said to make 7,200 alternations, reversals, or half cycles per minute.

Phase: If two alternating currents rise in the same direction, either positive or negative, at the same time, they are termed in phase; if not, they are out of phase or have a difference of phase.

The extent to which two or more C M F's, or currents, or both, differ in phase is measured in the degrees of a circle for convenience. One cycle is divided into 360 degrees and two currents having a difference of a quarter cycle are spoken of as being out of phase 90 degrees, or they are 90 degrees apart.

NEW BLOCK SIGNAL SYSTEM.

Holmes Francisco, of Rutland, Pa., has been granted a full patent on a block signal system for the use of railroads, on which he has been working for a long time. Mr. Francisco's system overcomes the disadvan-

tages of the many systems now in use, and is designed especially for tunnel use. It has, moreover, an additional feature, and not only gives an engineer warning of trouble ahead by lights along the track, but it lights a danger signal in his own cab. Mr. Francisco's idea is to divide the track of a road into sections or blocks, each of which has its share of lights along the side. When any car or train enters one of the blocks it lights a red lamp at the entrance and also a green lamp 2,000 feet in the rear, so that the engineer of a train following will have a warning signal before he reaches the dangerous block, and also a danger or stop signal at the entrance of the block. Besides he will have the danger signal in his own cab, which will keep burning until the obstruction is reached. A misplaced switch will affect the signal in the manner as heretofore explained and will give an approaching engineer due warning.

ELECTRICALLY OPERATED MINE HOISTS.

The electric motor is surely and steadily making its way in mining work. It has been used for a number of years for mine lighting and haulage and for operating coal-cutting machinery and drills. More recently, it has been applied with marked success for pumping and draining. But this application of the electric motor to mine hoisting has been retarded by a natural conservatism on the part of mining engineers. In work of this kind, safety and surety of control above all are the points to be considered. Mining engineers have been familiar with the performance of steam-hoisting apparatus, and have, perhaps naturally, felt some hesitation in changing to a new motive power however well this might be recommended. However, within the last year or so, the advantages offered by an electric drive have led a number of manufacturing concerns to turn their attention to this particular class of work with the result that they are making hoisting machinery, electrically driven, which seems to offer all the surety of a steam-driven plant, and in addition is more economical and more easily controlled. It would seem from this that it should not be long before there will be a goodly number of mining plants operated entirely by electric power.

KANSAS EIGHT-HOUR LAW.

The United States Supreme Court has affirmed the constitutionality of the eight-hour law of Kansas regulating labor on public works. Justice Harlan said, in handing down the opinion of the court, that if the statute is mischievous, the responsibility rests with the legislators, and not the courts. Chief Justice Fuller and Justices Brewer and Beckham dissented.

The Kansas law whose validity was called into question in the suit was enacted in 1891, and provided that eight hours should constitute a day's work for workmen employed by or on behalf of the State, or by any county or city, or other municipality in the State. It also prohibits contractors from requiring laborers engaged upon work for the State to perform more than eight hours' labor in a day. Both fine and imprisonment are provided for violation of the law.

The case decided was that of W. W. Atkins vs. the State of Kansas. Atkins had a contract with the corporation of Kansas City, Kan., for paving a street, and he was charged with requiring a workman named Reese to labor ten hours a day. He was prosecuted in the State courts, where the decision was uniformly against him. Atkins appealed from the decision of the State Supreme Court to the Federal Supreme Court, alleging that the statute is in violation of the first section of the Fourteenth Amendment to the Constitution, in that it denied him due protection and deprived him of his property without due process of law.

Referring to the only other decision of the court on the eight-hour question, that of Holden vs. Hardy, in which the court sustained the law of Utah fixing an eight-hour day for miners employed under ground, Justice Harlan called attention to the fact that while in the Utah case private interests were involved, the present case involves employment on public works only. The opinion was based upon the theory that all the municipalities of a State are the creatures of the State; that work for them is of a public character, and does not infringe upon the personal liberty of any one. He then added:

"Whatever may have been the motives

that controlled the enactment of the statute in question, we can imagine no possible ground to dispute the power of the State to declare that no one undertaking work for it or for one of its municipalities shall permit or require an employee on such work to labor in excess of eight hours each day, and to inflict punishment upon contractors who disregard such a regulation.

"It can not be deemed a part of the liberty of any contractor that he be allowed to do public work in any mode he may choose to adopt without regard to the wishes of the State. On the contrary, it belongs to the State, as the guardian and trustee for its people, to prescribe the conditions upon which it will permit public work to be done. No court has authority to review its action in that respect. Regulations on this subject suggest only considerations of public policy. And with such considerations the court has no concern."

Taking up the question of public policy, Justice Harlan said:

"If it be contended to be the right of every one to dispose of his labor upon such terms as he deems best—as undoubtedly it is—and that to make it a criminal offense for a contractor for public work to permit or require his employe to perform labor upon that work in excess of eight hours each day, is in derogation of the liberty of the employees and employer, it is sufficient answer that no one is entitled to absolute right and as a part of his liberty, to perform labor for the State; and no contractor for public work can excuse a violation of his lawful agreement with the State by doing that which the statute under which he proceeds distinctly forbids him to do.

"So, also, if it be said that a statute like the one before us is mischievous in its tendencies, the answer is that the responsibility therefor rests upon legislators, not upon the courts. No evils arising from such legislation could be more far-reaching than those that might come to our system of government if the judiciary, abandoning the sphere assigned to it by the fundamental law, should enter the domain of legislation, and, upon grounds merely of justice, or reason, or wisdom, annul statutes that had received the sanction of the people's representatives. We are reminded by counsel

that it is the solemn duty of the courts in cases before them to guard the constitutional rights of the citizens against merely arbitrary power. That is unquestionably true. But it is equally true—indeed the public interests imperatively demands—that legislative enactments be recognized and enforced by the courts as embodying the will of the people, unless they are plainly and palpably beyond all question, in violation of the fundamental law of the Constitution. It can not be affirmed of the statute of Kansas that it is plainly inconsistent with that instrument; indeed, its constitutionality is beyond all question."

On the point of the validity of a similar statute affecting private employment, Justice Harlan said: "Whether a similar statute, applied to laborers or employees in purely private work, would be constitutional, is a question of very large import, which we have no occasion now to determine or even to consider."

IMPATIENCE.

Nothing has done more to keep working-men down than their own impatience. Men who almost for a lifetime had been unable to see even a gleam of hope, on being finally induced to organize for mutual aid and protection, at once must see results or they talk of throwing up the sponge. They would even denounce organization as a fraud, and quietly sink into their former state, living without hope.

The history of trade unions furnishes numerous examples of the result of impatience, too often caused by lack of common sense and common decency. Men who had been literally ground into the dust would organize a union, and because of their membership—perhaps a day old—would demand and expect an advance of wages. They would also demand support in fighting against wrongs that their own cowardice had permitted for years, and on being refused aid, away would go even a semblance of a union—impatience thus even destroying hope itself.

Impatience is one of the most powerful weapons that the workingmen use against themselves, and even to-day men who should know better are exhibiting all the symptoms. They have impatience to bear

wrongs, but no patience with an effort to remedy wrongs that is not instantaneous in its action. Such men would build a house, brick by brick, but if it was to be demolished would knock out the foundation and bury themselves in the falling ruins.

If unions are to be beneficial to workmen or women they must be tried and tested and given a fair trial. The bare fact that men have organized a union does not prove anything but organization—but to secure results from organization there must be combination and solidification. A union can be anything but union of thought, action or purpose if time is not taken to put it into perfect working order and place it upon a good substantial basis, not financially alone, but as regards a definite policy in reference to matters pertaining to the trade interested.

Evils are never eradicated nor wrongs righted by a hasty legislation or impulsive action. Every detail of a grievance should be discussed as well as the remedies proposed, and should your first efforts prove failures, do not attribute them to the union but rather to your own shortcomings, which should be discovered and guarded against in the future.

Youth is vigorous, impulsive and impatient, consequently it commits many indiscretions. Young unions, or those young in unionism, should not commit like follies, or the results may be very disastrous. Let them rather move slowly, but with a well defined purpose, and their failures will be few, their victories and successes great and glorious.

—Ex.

ORGANIZED LABOR AND SOCIALISM.

Perhaps the most important event that occurred in the United States recently was the complete squelching administered to the socialists at the annual session of the American Federation of Labor, held in Boston. By a vote of more than five to one was the happy result accomplished. John Mitchell delivered a strong address against any and all attempts to mix up organized labor with socialism. President Gompers said "I am at variance with your philosophy. Economically you are unsound, socially you are wrong, and industrially you are an impossibility."

The great numerical strength of the

American Federation of Labor commands it to serious consideration. reported last September 2,000,000 taxpaying members, and it is assumed to have from 200,000 to 400,000 more members on the rolls.—Washington Post.

LABOR'S RIGHT TO ORGANIZE.

One demand made by the striking employees of the Chicago City Railway Company must impress all just men as unsatisfiable.

The right of employees to organize and have their organization recognized is not to be denied, not to be ignored, not to be put in the least jeopardy.

If men in their position have not the right to organize they have no rights at all, their condition is simply that of helots.

IF THEY HAVE NOT THE RIGHT TO ORGANIZE, WHO HAS?

If they have not that right, how did their employers come by theirs?

Nobody has ever questioned the right of employers of labor to belong to as many national employers' associations or national manufacturers' associations as they see fit. Nobody has questioned their right to bind themselves to follow the policies adopted by these organizations. Nobody has questioned their right to make agreements with one another respecting wages or respecting anything else within the law.

If the workingmen should say to a manufacturer: "You must not belong to the National Manufacturers' Association," there would be a tremendous and indignant protest.

Yet what greater right has the employer to say to the employee: "You shall not belong to your union"? What greater right has an employer to say that he will not treat with the union? What greater right has he to object in any way to the union?

The striking street car employes, therefore, are perfectly right in standing by their union and demanding its recognition. How can there be one code of morals for the workingman and another for the employers? Where will you draw the line? Will you say that a man with one million dollars has the right to belong to an association and a man with ten dollars has not?

The labor organization is a just and, in-

deed, an indispensable factor of modern life.

It is exactly in line with the progress and development of the times, which is steadily and always in the line of organized and united effort.

To say that this perfectly well-known and inevitable tendency shall affect all other classes in society, but shall not affect the men that work, is sheer nonsense.

Of course there must be labor unions, and there ought to be. Of course the tendency toward organization must affect workingmen, and it ought to affect them. The labor unions are a natural development of modern conditions. They have come to stay, to develop and become better agencies for progress and enlightenment, any corporation that sets its face against recognizing them is foolish, for it is combating a worldwide and absolutely certain movement.

The day has gone by for anything of that sort. We may as well recognize tendencies that are part of the evolution of the race. The single workman, dealt with singly by his employer and expected to labor and not to think, was natural enough in the days when every pair of shoes was made by one man, when one little blacksmith shop furnished one community's ironwork, when feudalism was still in control of men's affairs.

The mere fact that in these days five thousand men are often engaged under one roof for one company is enough to explain why labor organization is inevitable.

For the same reason that the gigantic operations of the present day cannot be carried on without the union of capital, the union of the toilers is equally certain and natural.

We might as well demand that a great railroad should be owned and directed in all its details by one man as that employers of many workingmen should deal only with the individual workingman.

To the wise employer, also, the labor union is a great practical advantage. It raises the quality and increases the efficiency of work, it immensely simplifies the direction of an enterprise, it fosters intelligence, it discourages incompetency, it betters the product, it furthers discipline, it is a bar against injustice. The employer that

recognizes the assistance he can derive from the labor unions has gained an enormous advantage. The best labor, the most efficient labor, the most interested labor, always pays the employer the best. Incompetent labor is dear at any price.

Those that decry unions would decry in the same manner any measure that sought to improve the condition of those that toil, any movement towards democracy, any effort to level the barriers of class and caste and bring about the brotherhood of man.

Whenever a labor union insists upon its recognition as a union it is doing the world's work, it is helping on the cause of man, it is in line with the development and growth of the race, which is wholly toward organized and intelligent effort.

It is also doing the just thing, the reasonable thing, the right thing.

We earnestly hope that in this case the union of the street car workers will be fully recognized.

The right to organize and to have organization recognized is just like the right to live, to think, to breathe, to be happy, if possible.—Chicago American.

THE BROTHERHOOD OF MAN.

In the mighty march of Progress
There is many a vain detour.
But the route is always upward,
And the aim is always sure,
And tho' men may prove uncertain
Faith must look behind the curtain
To the God, who is the DOER.

Since the molecules of matter
Into worlds and systems ran,
He has brought the life of marshes
And of jungles up to—man.
And to something far more holy,
We are moving slowly, slowly,
In accordance with His plan.

There is marsh slime still upon us
Of the jungle yet we smell;
For we sting and rend each other
In the mine and sweatshop hell,
And our greatest men rush willing
Forth to slashing and to killing
In the wars they love so well.

Once four-footed through the forest
In pursuit of food we trod,

And we left the riddled carcass
Of our rival on the sod,
Now we starve and freeze our neighbor
And refuse his right to labor
On his heritage from God.

Once we hung by tails from tree-tops
While we fought about a limb.
We have grown to men, from monkeys,
Since that far off epoch dim.
Yet man shows the old ape folly,
Fighting on the bridge and trolley
While the EARTH belongs to him!

There is room for all God's children,
On His beautiful, broad earth;
There is work and food and fuel,
For each being come to birth.
On each mortal son and daughter
He bestows air, land and water,
Love's bequest to human worth.

Greed has grasped for private uses
What was bounty for us all—
Greed has built a towering fortress
And sits guarded by its wall,
But the protest of opinion
Surges hard on his dominion,
And his fortress yet shall fall.

I can hear the tide increasing
In its volume and its force.
I foresee the wreck and ruin
It must cause upon its course.
For no hand can stop the motion
Of the tides of God's great ocean
When PROGRESSION is their source.

But beyond the strife and chaos
That must follow for a span
I behold the peace and plenty
Of the Great Primeval plan—
Of the dreamed of new condition
In the Brotherhood of Man.

—Ella Wheeler Wilcox.

✓ A LABOR SPEECH BY A PEORIA FACTORY GIRL.

“What the country wants and needs are union wives and daughters,” said a Peoria factory girl at a meeting held in that city lately.

“Where women have come to the front, haven't they always won? Who can fight against a woman who is a woman? Can't the women see that where their husbands

received \$2 a day before the unions were formed, they now receive \$3?

"The old saying 'Men must work and women must weep,' has gone out of style. There is very little use for the weeping, clinging women that men used to die for, and consider themselves heroes for doing it. What we want now are women who work, women who are not afraid to say, 'I demand the rights that belong to me and mine.'"

"The hand that rocks the cradle rules the world." The wives and mothers of union men would do well by following the Peoria girl's advice. What's the matter with the Peoria girl? She's all right.

LABOR'S SHARE.

Three years ago there was much alarm over the organization of trusts. To-day this alarm is transferred to the organization of labor.

Yet there is a difference between the two organizations. The prices of commodities rose earlier and went higher than the wages of labor. Dun's "index number" shows that the general level of prices rose 40 percent from July, 1897, to November, 1901, and has been nearly stationary for a year and a half. But there are very few unions that have secured an advance as high as 40 per cent. The bituminous mine workers, the longshoreman, the housesmiths—unions of practically unskilled labor—have made advances of 40 per cent to 100 per cent, but anthracite mine workers, street car employes and the skilled labor generally have advanced only 10 per cent to 30 per cent. Railway net earnings per miles of line increased 50 per cent from 1897 to 1902, but it required another year for railway wages to reach their increase of 15 per cent to 20 per cent.

While the wage-earner has gained in two ways—increase in rate of wages and increase in amount of employment—the capitalist has also gained in two ways—increase in prices and increase in amount of production. If the wage-earner works a larger number of days the employer gets a larger output. So that, with prices 40 per cent higher and wages 20 per cent higher the wage-earner's share of the increased production is less than his share of the smaller production. His command of comforts has

increased, but the profits and rents from investments have increased still more.

The precession of prices and wages is characteristic of all periods of prosperity in all countries, but it is especially marked in the United States, where the tariff protects prices from foreign competition, while free immigration admits foreign workmen as competitors for wages. In the five years from 1898 to 1903 the imports of merchandise increased 66 per cent, while the number of immigrants increased 270 per cent. The rise in wages is checked by immigration, but the rise in prices is favored by protection.—Prof. John R. Commons, in Review of Reviews.

UNIONISM IS COMMON SENSE.

The great majority of our social troubles are caused by those who do not recognize this principle of unionism, and who wish to get all the benfits of it without doing their share of the work. If some giant, fifty feet high, were to come from Mars and put us in our proper places our social problems might be solved in a little while. But we have to do all the straightening out ourselves, and it will probably take us a long time.

"No one lives to himself," and no one works to himself. This is the idea which all of the 1,200 labor organizations are teaching the working people of America. It is not only good business advice, but means by which the workers are enabled to raise their wages and reduce their hours of labor. It is also the highest moral teaching, far higher than the theological precept which tells people to save their own souls no matter who goes to destruction.

Some of the labor organizations that have union labels are teaching us that no one buys to himself. They are making us see that we must regard the welfare of others when we buy the goods in the stores as well as when we sell our own labor. This is a still higher moral idea, which only men and women of the highest type can understand.

Unionism, therefore, is not only a matter of dollars and cents. It is a moral force second to none among the wage workers. Its social ideals are the highest and it presents the means by which it can be realized.—Rev. H. N. Casson.

Letters From Our Local Correspondents.

Local Union No. 1.

St. Louis, Mo., November 30, 1903.

Editor Electrical Worker:

St. Louis is not a very busy electrical city at present. The World's Fair is taking care of a great many of the brothers and some of them are making more money than they ever did before.

There are a number of brothers coming to town and placing their traveling cards in No. 1, and as far as I can judge all are treated fairly as can be under existing circumstances. It is impossible to do anything to suit all mankind. There are some very much disappointed, and, of course, they will demur. I think all the officers of No. 1 are trying to do the right thing, but have so much on hand that they can not help making some mistakes, which, when shown them in a proper manner, have been rectified.

St. Louis is about to be afflicted with an organization to overthrow union labor. It is known as the Citizens Alliance, and is headed by a few would-be-leaders in any cause that would have a tendency to do their fellow man harm. They even go so far as to assert that union labor is nothing more nor less than a class of slavery and prevents the free American workingman from making an honest living. They attempt to bring Old Glory down and make it the banner of their organization. The old workers in the labor cause know what the meaning of the movement is, but the younger may be led to believe the statements of some smooth-tongued liar and make a mistake that will cause them much trouble in the future. My advice to all union men is to stand by your organization and fight to make it stronger, by so doing you will exemplify the adage of "In union there is strength," and your followers will bless you forever.

Local Union No. 1 is just now in such a condition that the efforts of any outside parties to overthrow it will prove the assertion that I have so often heard, that by harmonious action almost anything can be accomplished.

Our meetings are well attended and all

seem to have entered the field in the proper spirit. Every matter is carefully handled and much charity and good feeling is shown for each other.

No brother of the I. B. E. W. that is right need go hungry in old St. Louis unless he wishes to be dined and wined by the workers as the nobility of down-trodden monarchies are—then we kick.

Wishing that Local Union No. 1 will continue in the course it is now pursuing and that the I. B. E. W. will become a leading factor in our glorious nation, I am and will remain yours in the cause of labor,

BALDY.

Local Union No. 9.

CHICAGO, ILL., Nov. 30, 1903.

Editor Electrical Worker:

Work for linemen is not very brisk at present, as most of the companies are laying off men at this time of the year; but hope things will pick up soon.

We have just had some of our members out on a strike with the Chicago Railway in sympathy with the motormen and conductors, as we believe, with all other organized labor, that the Street Railway Company were discriminating against their union labor. This strike lasted two weeks, and was a victory.

I do not approve the idea of sympathetic strikes with conductors or motormen, as linemen always get the worst of it, but in this case we were lucky; thanks to our business agent.

We had but one member to go wrong in this trouble, and we have every reason to believe that he is a paid strike breaker by the Employer's Association.

Our local has voted to adopt the new constitution as a whole.

We have not voted on the convention city as yet, but I think El Paso, Texas, will get the vote of our local.

No. 9 gives a dance January 20 at the West Chicago Club, one of the best halls in the city.

By the time the next Worker is out we will be in our new hall at Sam T. Jack's

Dec. 1903

building, East Madison street, room 7, third floor. I hope this will be the means of bringing the old members into line again, as our last hall was not a cheerful place. I could not blame the members for staying away.

Brother Loyd would like hear from Local No. 197.

I would like to hear from Brothers Hadler and Kelley. Don't forget the number.

Yours respectfully,

CHAS. M. PAULSON,

Local Union No. 56.

ERIE, Pa., November 27, 1903.

Editor Electrical Worker:

I hope pretty soon to hear of our new constitution being adopted as a whole, as it can not be adopted any other way, and be beneficial to the rank and file of our organization. There may be certain sections of the constitution that will not suit some locals whose conditions differ from other localities, but as it is impossible to legislate for each and every local, as some would like to have done, the delegates to the Salt Lake convention adopted a constitution for the I. B. E. W. in general and tried to cover every branch of our trade, so let us hope and work for the future success of our organization and the labor movement.

I had the pleasure of attending the A. F. of L. convention the last month, and while our delegates did not elect a member of the Board we gave them a merry chase, for Brother H. W. Sherman secured a big vote for eighth vice-president and C. Nelson, of No. 3, came near being elected as fraternal delegate to Great Britain. Our delegates were always on the alert to protect our interests as electrical workers and they performed the tasks assigned them with credit to the organization they represented.

Brother George Burns, of No. 17, was especially honored with a place on the most important committees and to receive such an honor at an A. F. of L. convention I am sure was appreciated by our delegation and by Brother Burns.

Well, Brother Gleason, of No. 39, you missed a good time by not attending our annual ball for, as a social event, it eclipsed any affair of the kind ever held in Erie, and

the electrical display was simply marvelous. Too much credit can not be given to our committees, and especially to Brothers F. Briggs, Ed. Semmence, F. M. Seamah, Jas. Welch, O. Fuller; in fact, every brother who participated in making it a success, and considering that every hall in the city was open for dancing on Thanksgiving eve, our ball was a marked success.

Mr. Editor, I wish to take this opportunity of extending my heartfelt thanks to our brothers of Locals No. 103, 104 and 396 for the good treatment received at their hands while in the city of culture, and I am sure our delegation joins me in thanking Brothers Mallory, Birmingham, Frank Kelly and all the brothers of the Hub.

Yours fraternally,

J. J. REID,
Press Secretary.

Local Union No. 77.

SEATTLE, WASH., Nov. 23, 1903.

Editor Electrical Worker:

Work in Seattle is pretty slack at present, but expect it will open up again by spring. Most all of the boys are at work, but no spare jobs. I wouldn't advise anyone to come this way looking for work just now.

We take in a few applications almost every month, and are doing good work here. We catch all newcomers and give them applications to fill out. Mat Smith from 23 took a look at the city Sunday; he is pushing a bunch for the W. U. T.

Yours fraternally,

CHAS. IRHL.

Local Union No. 98.

PHILADELPHIA, PA., Nov. 30, 1903.

Editor Electrical Worker:

I suppose it is up to me to try to get something in the Worker to interest the readers, if possible.

There is not a great deal for me to say, other than work is getting slack here, and would not advise any brother to think of making this his stopping place for the winter.

I hope that the locals throughout the country are aware of the fact that we are still at odds with the "Big Seven," which consists of M. R. Muckle, Francis Brothers & Jellett, D'Ober Engineering Company,

Walker & Kepler, W. McIntyre, Buchanan & Co., and Keller, Pike & Co. I would also add to the above list the names of two others, who, while not connected with the "Big Seven," are antagonistic to organized labor. They are R. C. Strang and the Philadelphia Electric Construction Company. The locals throughout the country in whose locality any of these firms have work should do all in their power to cause these firms to sign the agreement with local No. 98. We have had a long, bitter fight, and with the support of all I. B. E. W. locals will win out yet. It has cost us ten or twelve thousand dollars to keep up the fight. The following locals have assisted us considerably in our fight: No. 3, of New York; No. 52, of Newark; No. 68, of Denver, and No. 28, of Baltimore. These locals No. 98 thanks most heartily, and sincerely hope that we will be in a position at some time to reciprocate. The pressure that is being brought to bear by the above-named locals is having more or less effect on the contractors here, and I hope, in my next letter, to be able to give more definite news as to how the situation stands.

Wishing success to all the locals, I remain

Fraternally yours,
F. H. QUARTERMAN,
Press Secretary.

Local Union No. 113.

COLORADO SPRINGS, COLO., Nov. 27, 1903.
Editor Electrical Worker:

You have no doubt seen that the so-called Citizens' Alliance have recently formed a national association and we in this community are feeling the effects of it.

They are formed for the purpose of avoiding strikes, boycotts, lockouts, etc.; but the secret purpose of the association is to disrupt organized labor, as Denver, Omaha, Kansas City and a couple other cities can testify.

The only bad feature about the proposition is the fact that there is practically no work at present and none in view this winter.

All trades are in the same position and consequently it is hard all along the line.

Work became so slack that our membership has been decreasing until at present we have a membership of about eleven

members and we hope to keep this if possible, for we know that with a much smaller membership we will simply have to lose our charter.

The efforts of the alliance are to disrupt the Building Trades Council and then handle the individual locals.

They attempted to coerce the carpenters and get them to withdraw from the council, but with no success; and then they started in on the plumbers and had very good success, for this morning the plumbers signed up with their bosses to work on any old job, union or non-union, and this consequently means that they have thrown up the Council.

We can't tell at present how the rest of it will go, but think that the balance of the crafts are true goods.

The trouble has been on now since the first of October with a few of the crafts and the balance of us since the second of November. So keep away from Colorado Springs, unless you are not looking for work and have plenty of money.

Fraternally,
CONTRALTO.

Local Union No. 121.

DENVER, CO., November 15, 1903.
Editor Electrical Worker:

Local No. 121 is still meeting each Wednesday evening at their hall, second floor of Charles' Block, but we have some members that it appears have forgotten the place or the date, as we seldom see their faces there.

We have had a series of accidents in the last few months.

Brother Ryan is still in the hospital, having his leg and arm broken for the second time. He has been laid up since the month of June.

On the twenty-first of October Brother Frank Brown got grounded with 2,000 volts by a guy breaking, and when the contact was broken he fell fifty feet to the ground. He was unconscious when picked up, but revived at the hospital, and then we found that no bones were broken or other injuries than two bad burns, one on the hand and one on the foot. I am glad to say that he is at work again.

On the twenty-seventh of October Brother Swesher fell from a telephone pole and

broke his wrist, which, he says, is working overtime now, as it is beginning to knit.

Most of the boys are on committee work now, as we are working on our fourth annual ball for March 24, and we expect to eclipse all former balls.

Brother Wm. Fitzpatrick would like to know the whereabouts of Ed Waters. Please write, care of Colorado Telephone Company, Denver.

Yours fraternally,

J. E. VOORHEES,
Press Secretary.

Local Union No. 157.

ELKHART, IND., Nov. 29, 1903.

Editor Electrical Worker:

Work at this place is very slow at the present time, and would advise all floaters to stay away. Brothers Geo. Goss and John Logan have taken a traveler and caught on at Wabash. Brother M. M. Welsh of 183 is with us. What has become of the P. S. of 183? Would like to hear from the 183 boys. Hoping to do better the next time,

I remain,

F. LIVINGSTON,
Press Secretary.

Local Union No. 185.

HELENA, MONT., Nov. 8, 1903.

Editor Electrical Worker:

Again we have been compelled (three times in six months) to fill the office of press secretary. Our other brothers were too active in the cause of unionism, and, of course, had to resign in order to move to another town to earn a livelihood.

It seems rather peculiar, to say the least, that capital can "boost" our active workers when they think they get too "previous," and when a man is not independent of his job he has to lay low. The Constitution of this great and glorious republic gives each man, woman and child the right to think as he pleases and hunt happiness in his own sweet way, provided he does not displease our capitalistic friends.

I know that the boys could fix things as they want if they would only get together, stick together, and vote together, and right. By right I mean for their own good. But do they? Well, not that any one knows of. I would like to make a new order of business

in every ritual in this United States, and that would be political discussion, and yet we have labor leaders (so-called) advising us to steer clear of politics. Sure thing; keep clear, capital doesn't like it. Neither of the parties will give us anything, nor ever will. If the laboring man (meaning all wage earners) should go into politics and get together, where—oh, where—would capitalistic office seekers land? We might even have our own way, and that would be anarchy. I should say, yes; and, mind you, the majority rules, (sometimes). We, the laboring men of the country, hold conventions, put some bright, promising man at the head, and capital immediately comes to the conclusion that that particular man ought to be working for them, and our bright, promising man is holding down two jobs, and looking after the interests of the best paying boss, and laboring men can't afford to pay big salaries. If every man was sure of his job at good pay, and his children after him, do you think he would sell his honor? I don't. Every man is good at heart—circumstances may alter cases.

Now, I expect to get jumped on with both feet for that statement; but good people, I can refer you to two cases that have come under my own personal observation, to say nothing of Sam Parks.

Work here is not as good as it was a month ago, although the boys are all working; but no opening for newcomers.

With best wishes from Local No. 185 to all fixers, I am

Fraternally yours,

E. W. GREENEP,
Press Secretary.

Local Union No. 171.

ANN ARBOR, MICH., Nov. 20, 1903.

Editor Electrical Worker:

Work has been good here all the summer, and there don't seem to be much let up to it.

The new telephone company is called the Washtenaw Home Telephone Company. They are putting in a fine telephone system here, and have a big gang of men putting in the underground work, as well as a gang setting poles. They want some good line men—those that carry good cards—and no others need apply.

We are still alive and doing business, and pick up a new member every month, and always on the lookout for them as they come along.

With best wishes for the welfare of the Brotherhood, I remain

Yours fraternally,

FRANK DUNN,
Press Secretary.

Local Union No. 260.

FORT WAYNE, IND., Nov. 29, 1903.
Editor Electrical Worker:

The Worker for November has been a pleasure to me in many ways, most of all in the omission of so much of the "Hello, Boys" contributions, which have been a bore to all save a small circle of friends, or the immediate locals from which they have emanated. Let us have less quantity and better quality in the make up of our magazine. Let it be a publication which anybody, from an electrical worker to a banker, may pick up, read interestedly, and from which he may gain some intelligence. True, the Worker, in the past, has been a helpful journal in many ways; don't let me be understood as casting any shadows upon its good points, the able articles that have spoken to its thousands of readers from time to time, and strengthened their hearts in the wearisome fight, nor upon the wisdom of its chief promoters.

The good and the bad will persist in getting all mixed in this old world; constant vigilance only can keep them, in a measure, separated.

So, it is everyone's duty to discriminate along this line—to cling to the good and to weed out and discard the bad and worthless.

Our worthy editor has sounded the key note, so now, brothers, join in on your respective parts, whether it be a light, airy tenor, or a heavy bass that will reverberate from hill to dale; give us the very best you have in stock—we are all worthy of your very best thoughts in these matters of right and equity and truth—and if it isn't good enough to suit our chief, if he doesn't, in his clearer conception of what is and what is not printable, consider your contributions just up to the standard of reading matter in our journal, don't get sore and sulk and throw up your job. Realize that we must

progress or perish; that our official paper is progressing, and therefore in a fair way to live out a ripe old age. Just look into yourself and see if there isn't some fault at home. Instead of blaming the other fellow, if we could but school ourselves to self reflection first, to see if our own position were justifiable, what a ring of harmony would burst forth upon earth.

Another thought, and I am done. Brothers, every one of you now, don't let the editor and us miserable press secretaries alone produce your paper. I daresay there is enough literary talent going to waste among our vast throng of electrical brothers to produce several magazines. Don't miss the opportunity, aye, the privilege you are thus afforded of developing such ability. Don't hide your light, however small it may seem; the little candle in the window is as truly a guide as the arc on yonder high tower, and may help a brother from wandering astray. Let every brother turn in and help once in a while at least; you would be the wiser for the attempt, and we shall have the brightest and most progressive magazine of them all.

Yours fraternally,

PRESS SECRETARY No. 260.

Local Union No. 288.

WATERLOO, IOWA, Nov. 20, 1903.
Editor Electrical Worker:

No. 288 is still hammering with the same old strike. Work is not very swift at present in this section of the country, but none of the boys are idle.

I guess many of the brothers formerly of this local, but now scattered throughout the Brotherhood, are waiting to hear the result of the Cedar Valley Tel. Company trouble. Well, brothers, the C. V. T. Co. is a back number and a thing of the past. They have sold out to what is known as the U. S. Telegraph and Telephone Company. It has been rumored by some of the heavy stockholders that it was through the linemen that they came to their financial crisis. The men were called out September 15, at 2 p. m., 1902. They thought the boys did not have the backbone to stick it out and they would have a snap, but the snap finally broke and they fell, and great was the fall thereof.

A committee was appointed and the same waited on the new company, but the manager being out of town they have been unable to report. Everything looks favorable.

The Bell Telephone at this place will go under ground next year.

The new company will install a new system and do lots of outside work. I shall be glad to keep you posted.

The brothers that are still here are : With the Bell Company, Chas. Bickley, Earl Fisher, Wm. Braton, and S. D. Kimball, foreman. With the Light, Fred. Fisher, James Dunham, I. J. Wright, and Frank Doxie, foreman. James Hurkes, Carl Hichcock, John George and C. Ford are holding down the Waterloo Supply Company. Brother Sauser is wiring for Haul Bloom, Western Union, and Birt Markhan, with the Postal.

Brother Howard Miller is just recovering from two months' illness.

By request. If this meets the eye of Bob McIntire it will be to his interest to write to S. D. Kimball, Bell Telephone Company, and also Joseph Curtis is requested to write to the same.

Dave Jarvis, write me at once, 515½ Jef-ferson street.

Orlo Dusk has left for Albuquerque, N. Mex. He is right; boys, treat him well. Write us, Oley.

Fraternally yours,
I. J. WRIGHT.

Local Union No. 296.

POUGHKEEPSIE, N. Y., Nov. 20, 1903.
Editor Electrical Worker:

Every man that is true to his local and is always thinking of the welfare of the I. B. E. W. should start at the beginning of the Worker and study its contents. There is surely a whole lot of knowledge that can be obtained by studying. I don't mean take up the Worker and read two or three letters from different locals, start and read them all, there is always something new.

We are expecting a great time here next week. Our charter is going to be opened, and there are a number of boys here who are ready to come into Local No. 296.

Work here is not very brisk. The Light Co. have all they can do at the present time,

the entire gang are all card men but two. Boys, we are always reaching out for more, and the more we get the more we want.

The H. R. T. Co. have only enough work or their regular men (three being card men).

Local No. 296 would like to hear from Brother Neil Carmody ; if he should see this letter will he please communicate with this local.

Our Editor is certainly getting out a neat Worker ; one we should highly prize.

Brothers, let us from now on always think of the welfare of others before ourselves, and we shall always feel proud of ourselves by so doing.

Yours fraternally,

PETE,
Press Secretary.

Local Union No. 299.

CAMDEN, N. J., Nov. 25, 1903.
Editor Electrical Worker:

No. 299 is doing well, and if a few more members would only help we would be doing very well. At present we have one brother laid up and all of the rest are working. We will have a grand drawing on December 17 for a gold watch. The proceeds are for our treasury which is rather low on account of the drain of sending a delegate to the convention.

The Eastern Telephone Co. has started to build a line to Atlantic City, N. J., and nothing but the green goods are accepted as an application for work.

The press secretary of Local Union 250 certainly made a good suggestion in his October letter in regard to educating the members of the I. B. E. W. That is something that we all need. He suggests that part of the Worker be devoted to that, but I think that on account of there being so many branches to the trade that it would be hardly practicable.

If each member was assessed 25 cents every three months I think the Brotherhood would be able to purchase and maintain an excellent circulating library and, as he says, the time will come when the most skilled electricians in the country will belong to the I. B. E. W. I will add further the words of Carroll D. Wright, that the day will come that this country will be so thoroughly organized that by means of

strikes and sympathetic strikes all manufacturing and commerce of this country can be brought to a standstill, then the capitalist will be willing and glad to arbitrate; and I feel confident that by educating the union men of the country we will be hastening the day of our real independence.

Yours fraternally,

FRED C. JACKSON,
Press Secretary.

Local Union No. 336.

OSKALOOSA, IOWA, Nov. 20, 1903.

Editor Electrical Worker:

Local No. 336 has just completed its first year. The last month has been one of great encouragement to those of us who have staid in the city and had to rustle to get the few members in town together on our meeting nights.

Brother Fred Haines, of the Iowa Telephone, has been here with a bunch rebuilding. Some first-class men came to work on the job. They all took off their coats to help us ginger up. The result is there is not one journeyman electrical worker, and only two helpers, in this city who do not belong to our local. The old wheel horses of Local No. 336 feel more grateful than words can express toward Brother Haines and the others, and hope they will be treated well wherever they may go.

On the 10th we admitted to membership the helpers of the Iowa bunch, and after the ceremonies adjourned for a few refreshments. All had a good time and got acquainted with each other.

The Iowa job is about over, and the other companies are down to a winter basis, as far as work is concerned.

As this is written by special order, I will make it short.

Fraternally yours,

CHAS. BOYD,
Special Press Secretary.

A LEADING department store in Pittsburgh, Pa., has decided to inaugurate an early closing movement, closing at 5.30 on week days and 6.30 on Saturday. During the hot months of the summer the closing hour will be 5 p. m. This is a good move and we hope all department stores will follow suit.

SOME KINDS OF HAND LABOR.

While so much has been said on the subject of labor, one is reminded of the extreme fineness of some hand labor through the two 24-inch reflectors that have just been ordered for the Harvard astronomical observatory, the one to be set up at some point near Boston and the other to go to the Harvard station at Arequipa, Peru.

So delicate is the operation of finishing a lens such as that just ordered by Harvard for her Arequipa observatory that the famous lens maker, Alvan Clark, could find but one young man in all New England who was thought worthy to be apprenticed to the simple position of standing with his thumb, a dish of water and a bit of fine powder to grind down the glass to its final proportions. This work, which looks so simple, is complicated by a thousand and one difficulties known only to those acquainted with the telescopers' art.

In the first place, the glass is manufactured with consummate care in the one furnace in France that is capable of producing it. The slightest imperfection must be carefully investigated or the whole thing may prove worthless. A careless jar may fatally injure the lens, and even the heat of a man's thumb will cause an infinitesimal expansion that will ruin it.

When the glass is "done," then it requires two or three years to finish it, that is, grind it to perfection by the simple rubbing of it with the thumb and finger. But here a skill and judgment are required that it is difficult to find in the whole country.

What is "hand labor" then? Is it not the mind that gives the hands its cunning? The man who polishes the Harvard lens does a work as fine as the surgeon whose hand performs a \$10,000 operation on a millionaire.—Boston Globe.

A BIG CONTRACT.

Lynn, Mass., reports that the General Electric Company has secured a contract from the New York Central Railroad for the equipment of the New York tunnel with electricity, involving about \$12,000,000. The contract calls for thirty electric locomotives, ten steam turbines of 5,000 kilowatts each for generating purposes, and the complete equipment of the big power plant.

Dec. 1903

TRACKLESS TROLLEY EXPERIMENTS.

[Courtesy of the *Electric World and Engineer*.]

Due probably to the fact that the average roads in Europe are so much better than they are in the United States, experiments with what is known as trackless trolley have been far more fre-

ton, Pa. As will be seen from the engravings in Figs. 1 and 2 (see cover), the vehicle is practically an omnibus of the automobile type having a trolley car platform with step in rear, and a seat in front for the motorman, with steering gear, controller, brake mechanism, etc. The under-running framework of tubular steel carries an automobile motor which need not be here described, as it is proposed to make changes and improvements in this particular respect. The interest centers in the overhead construction, which of course is of a double trolley type, as shown in the detail diagrams. The trolley allows the coach to turn out a distance of fifteen feet to

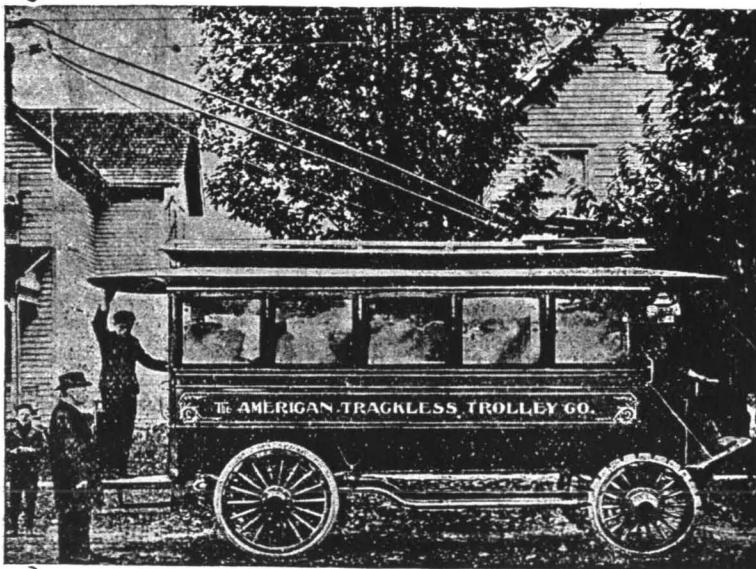


FIG. 1.—TRACKLESS TROLLEY 'BUS.

quent and successful there than here. We have noted from time to time in illustrated articles the work that has been done in Germany and France with vehicles of this description. It would appear from the data recorded that the results are of an encouraging nature, even although from the absence of the track the effort is so much greater that at least twice as much current is required for the same tractive effort. We are glad to be able to call attention to an experimental line now being operated in this country at Scranton,

either side of the road and thus permits the driver to handle his vehicle just as readily as though were entirely free and unat-

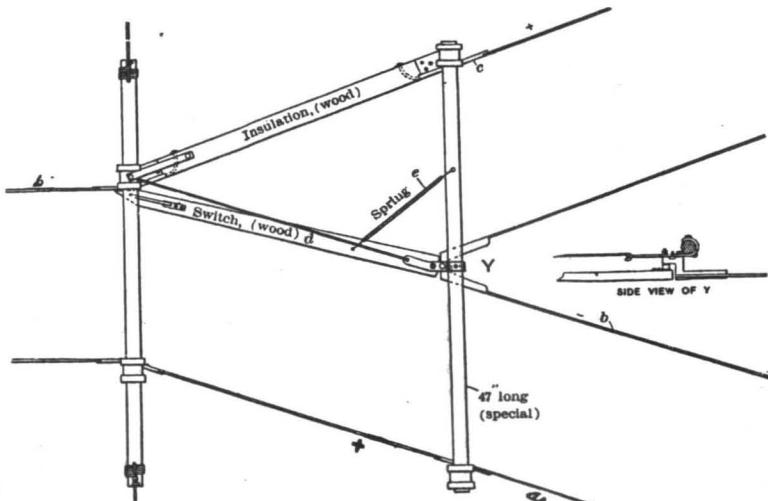
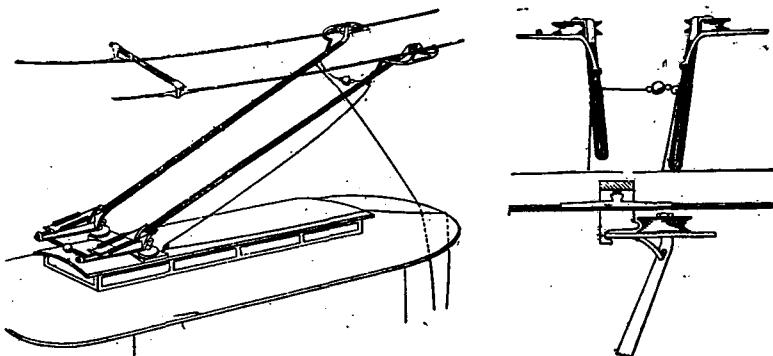


FIG. 3.—OVERHEAD SWITCH.

tached. The system shown is not only adapted to two wires but three wires. In the latter arrangement the center, or third wire, serves as the common feed wire, the two outside wires being the return circuit. With the three-wire system no switches are necessary at the line terminals where loops are arranged for that purpose, but with the two-wire system a switch is located at the entrance of the loop at each end of the line, as shown in the diagram, Fig. 3. The feed wire is carried around the loop to *c*, where it is insulated from the return wire, *b*. When the trolley wheel reaches the wooden track or switching piece, *d*, it is thrown over the wire, *a*, returning to its original position under the influence of the spring *e*. Fig. 4 shows the two-wire track and the trolleys in contact therewith, while Figs. 5 and 6 show the trolleys themselves as well as the method of guiding the trolley wheel across gaps. The overhead system appears readily

adaptable to sharp curves, and even to passing regular trolley lines, while of course spurs can be extended to car barns, passenger depots and freight houses.

As to the cost of the system, the installation of trolley wires and supports is put at \$1,600 per mile, while the cost of a coach carrying twenty passengers seated and fifteen standing, with full equipment of mo-



FIGS. 4, 5 AND 6.—DETAILS OF TROLLEY.

tors and trolleys, is put at \$2,600 each. The installation at Scranton was made by Mr. F. G. Tilton, of the American Trackless Trolley Company of Boston, whose president, Mr. A. B. Upham, is the inventor of the system.

POINTED PARAGRAPHS.

No man is in business for himself if he is married.

A poor excuse is better than none—if it goes with the boss.

The ticker doesn't tell everything that happens in Wall street.

Champagne drinking affects the eyes; it makes \$5 look like 30 cents.

A man is sometimes known by the things he might have done but didn't.

Too often the man who pushes himself along in the world shoves others aside.

Wise is the young man who doesn't have his fiancee's name engraved in the ring.

Opinions should be formed with great caution and changed with still greater caution.

A woman will forgive a man almost anything except his failure to ask to be forgiven.

A schoolgirl never graduates until she has learned to stab pickles with a hairpin.

If a music teacher can't make anything else out of the voice of an heiress he can make money.—Chicago News.

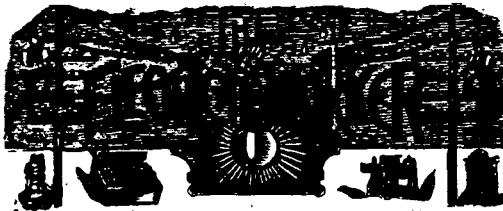
SIDEWALK ORATORS.

Orators of this description are not found in history, and are, as a rule, confined to a class of men who are fond of finding fault with the management of their local or International Union. They are quick to see the defects in any plan offered for the betterment of their fellow members, and are quick to point them out. This is commendable if made at the proper time and place, and if actuated by an honest desire to improve the laws or rules, as is honest criticism in all cases; but when animated by a desire to find fault, and objections are offered with a view to cause discontent in the minds of the members, that spirit cannot be classed as praiseworthy. The proper time and place to criticise is in the meeting of the organization, and the motives governing the criticism should be a desire to improve, to build up, to elevate, and not to pull down. An honest critic generally voices his opinion, respects the opinions of others, and will offer another plan or is willing to consider a plan offered by another—Ex.

Dec. 1903

THE ELECTRICAL WORKER

49



OFFICIAL JOURNAL OF THE International Brotherhood of Electrical Workers PUBLISHED MONTHLY

H. W. SHERMAN, - - Publisher and Editor
103-4 Corcoran Building, Washington, D. C.

EXECUTIVE BOARD.

Grand President—F. J. McNulty,
103-104 Corcoran Bldg., Washington, D. C.

Grand Secretary—H. W. Sherman,
103-104 Corcoran Bldg., Washington, D. C.

Grand Treasurer—F. J. Sheehan,
86 North street, New Britain, Conn.

GRAND VICE-PRESIDENTS.

First District—F. J. Sweek,
507 East 55th street, New York City.

Second District—E. T. Mallory,
987 Washington street, Boston, Mass.

Third District—E. P. Allman,
302 Grant street, Pittsburg, Pa.

Fourth District—Dale Smith,
111 Monroe street, Memphis, Tenn.

Fifth District—F. L. Witters,
2517 Spencer street, Omaha, Neb.

Sixth District—J. P. Connor,
Union Depot Hotel, Dallas, Texas.

Seventh District—M. J. Sullivan,
253 Fulton street, San Francisco, Cal.

SPECIAL ORGANIZER FOR THE SOUTH,
W. J. Gilsdorf,
3931 North 20th street, St. Louis, Mo.

Subscription \$1 per year, in advance

As THE ELECTRICAL WORKER reaches the men who do the work and recommend or order the material, its value as an advertising medium can be readily appreciated.

WASHINGTON, D. C., DECEMBER, 1903.

W. N. Gates, Special Advertising Agent,
29 Euclid avenue, Cleveland, O.

*This Journal will not be held responsible
for views expressed by correspondents.*



THE HENRY E. WILKENS PRINTING COMPANY

THE ELECTRICAL WORKER.

We have received many letters saying the November issue of the Worker was the very best published in a long time. It is our desire to make it better each month, but we must have the support of the members of our organization. The press secretary of Local 260 strikes the right note in his

advice to the members. Remember, it is your journal. We are open to criticism at all times, but remember when you find fault give us some suggestions. The editor is doing all in his power to make our journal one to be proud of. We take this opportunity to thank those who have contributed and ask them to come again. We must insist that letters sent in by the regular press secretaries be brief, to the point and of interest to all the members, not one certain locality. Resolutions on the deaths of members will not be published. Note will be made of the death only. It has come to our notice that some members of the Brotherhood are writing articles for some of the electrical papers. We wish to remind them that their first duty is to their own official journal. If they are capable of writing good articles let us have them. Give us your support to make ours the best of magazines.

THE NEW CONSTITUTION.

On another page of this issue we publish the referendum vote on the new constitution. The vote is largely in favor, and we hope those locals who voted against adopting it will fall in line and give it a fair trial, and remember that two years is a short time in the history of an organization. At the expiration of that time another convention will be held; then changes can be made. In the interim there is nothing to do but stand by the majority vote. The new constitution gives us a chance to build up our organization by sending out organizers and giving them jurisdiction over certain districts. They are not only in a position to form new locals, but they can visit those we have in our Brotherhood, give them good advice and show them how to run a local on business principles. Some of our locals have objected to raising our per capita tax to thirty cents. In our opinion it is a good move, as it gives the Brotherhood a chance to create a defense fund; also a convention fund. A defense fund is something that every member of our organization will agree is a good thing, and it would be impossible to create this fund and pay funeral benefits and all running expenses out of twenty cents. The convention fund is a good thing, because it will give us what we have tried hard to get—a representative conven-

tion. It will give the small locals a chance to send a delegate, and not have to depend on proxies, and each local will have a say in the convention. Starting December 1, 1903, the per capita tax will be thirty cents on each member.

Let us all give the new constitution a trial, and don't condemn it until it is proven of no value.

THE A. F. OF L. CONVENTION.

The twenty-third annual convention of the American Federation of Labor, held at Faneuil Hall, Boston, Mass., November 9 to 23, is now a matter of history. The convention was the very best ever held by the A. F. of L. and a great good has been accomplished. If every organization represented on the floor of the convention stands ready to obey the mandates of the majority the next year will be a bright one for the labor movement, as it will do away with many of the petty jurisdiction fights, and instead of constant bickering there will be harmony. To those who failed to get just what they wanted the convention may not have met with their views, but to all fair-minded men it was a great success.

The delegates representing the I. B. E. W. were ever on the alert to protect the interests of our craft. Many letters were received by them to have certain resolutions put through, but when we had to defend ourselves against some that had been put in we found we had our hands full. At the New Orleans convention we had to fight to hold the conduit. We little thought that at this convention we would meet a protest from the metal trades against the electrical workers hanging fixtures in buildings. The fixture maker demanded the right not only to make the fixture, but to hang it as well. After a conference with the delegates representing the fixture makers the protest was withdrawn.

The following was offered by Delegate George Burns:

I desire to enter a protest against the seating of the delegates of the street car men under their present title, the same having been amended since the last convention without the knowledge or consent of the International Brotherhood of Electrical Workers.

The Committee on Grievances recom-

mended that the Executive Council be required to immediately give a decision as to the jurisdiction of the Amalgamated Street Railway Employees Association under the new charter. It was moved that the report of the committee be concurred in. President Gompers stated that President Mahone had wired him that the Amalgamated Street Railway Employees' Association claimed no jurisdiction under the new charter. Delegate Burns favored the report of committee. The report of the committee was then adopted.

President Mahone, of the Amalgamated Street Railway Employees' Association, was not in the convention, but was in Chicago handling the strike. We have assurance from Brother Mahone that he has no desire to infringe on our rights.

The following was introduced by the delegates from the International Alliance Theatrical Stage Employees:

Whereas, The past year's history of the trade union movement has shown that great danger threatens its foundation and fundamental laws of organization through the heartless and selfish motives of aggrandizement by many of our large national and international unions courteously taking unto themselves the work and rights of trade long established; and

Whereas, This continued trespassing upon the trade rights and jurisdiction belonging to these many crafts have been honestly granted to them by right of labor, and the consent, by jurisdiction granted to them as strict trades men by this great American Federation of Labor; and

Whereas, It is well known and self-evident to all that this crime against strict trade autonomy (honesty) has not alone tended to disrupt our unions, but is bringing such discredit upon our entire movement that the condition has changed whereby our fellow-workmen have become more feared than the aggressive employer; therefore be it.

Resolved, That this, the twenty-third annual convention of the American Federation of Labor reaffirms its doctrine of strict trade autonomy, and hereby gives notice to all its affiliated crafts that they must strictly confine themselves to the actual jurisdiction that their charters call for under penalty of having said charter revoked.

The committee on resolutions claimed that the question was fully covered by the constitution of the A. F. of L. As one of the delegates from the Theatrical Stage Employees referred to the electrical workers we, of course, took issue with him. To

the credit of the delegates from the stage employees, they claim work behind the foot lights only, and they said that under no circumstance would their organization sanction any infringement on our rights.

We will not attempt to give a detailed report of the convention, as we are aware that our readers have received same through the daily press. That peerless champion of labor's rights, Samuel Gompers, was re-elected; also, the old reliable, Frank Morrison, was again chosen to handle the financial affairs for another year. All of the members of the Executive Board were re-elected. The Executive Board was increased two. Brother O'Keefe, of the Longshoremen, was elected Seventh Vice President, and Brother Wm. Spencer, of the Plumbers, Eighth Vice President. Both of these gentlemen are well known in the labor movement, and possess executive ability, and we are sure they will add strength to the movement. San Francisco was chosen as the next city for the convention.

INFORMATION WANTED.

Will any one knowing the whereabouts of J. E. McKibben kindly notify his uncle, J. W. Darrah, 48 New street, New York? When last heard from he was in Newark, N. J. Any information will be gratefully appreciated.

Any one knowing the whereabouts of Leo W. Moran, formerly a member of No. 27, Lorain, Ohio, will kindly write to Miss Mary E. Moran, R. F. D., No. 2, La Porte, Ohio.

Any information concerning the whereabouts of Eugene McCarthy, a cable splicer, will be greatly appreciated, as his mother is very ill over his absence. Address, Mrs. McCarthy, 526 Knower St., Toledo, Ohio.

If the watchful eyes of Jim Sullivan, Joe Johnson, Sam Patterson or Jack Steadman should happen to light on this, I wish they would kindly drop a few lines to J. P. Stafford (Slim), care of Wm. Marshall, C. P. R. Telegraph Company, Toronto, Can.

Anyone knowing the whereabouts of John Angus Currie, kindly write E. H. Mead, 819 Monroe St., Toledo, Ohio.

Any one knowing the whereabouts of Frank Burke, a former member of Local No. 142, Wheeling, W. Va., will kindly inform G. H. Wey, 189 Fifteenth street, Wheeling W. Va.

Anyone knowing the whereabouts of J. B. Perry, a member of Local 235, Cincinnati, Ohio, will kindly write to his wife,

Mrs. J. B. Perry, 1412 Main street, Cincinnati, Ohio.

REFERENDUM VOTE ON CONSTITUTION AMENDMENTS.

Local.	No.	Y	Local.	No.	Yes.
192.		27	29.		105
98.		258	7.	8	142
227.		75	41.		27
176.		82	264.		88
69.		15	398.		16
87.		15	218.		32
178.		20	16.		52
238.		20	114.		7
321.	8	1	6.	52	47
22.		15	166.		36
299.		20	185.		8
8.	1408		308.		17
81.		64	179.		20
268.		87	86.	88	20
4.		17	160.		59
295.		17	88.		17
246.		55	284.	8	17
258.		88	47.		50
26.	16	87	292.		21
20.		105	80.		105
154.		30	247.	6	213
81.		80	121.		42
108.		26	47.		17
156.		28	870.		57
118.		16	52.		220
240.		50	39.		12
197.		45	277.		17
184.	545		806.		50
112.		42	885.		50
188.		40	209.		218
241.		7	246.	12	17
198.		15	66.		57
177.	2	8	265.		40
21.		38	69.		28
96.		16	368.		50
189.		48	115.		15
816.		14	2.		218
823.		25	5.	85	5
839.		8	189.		9
90.		35	214.		59
70.		21	25.		54
118.		88	204.		121
10.		24	56.		20
95.		22	428.		24
406.		7	97.		10
827.		16	409.		10
122.		12	436.		12
140.		102	17.	8	250
14.		289	811.	2	6
290.	6	15	272.		15
243.	6	9	68.		107
132.		27	116.		28
24.		184	262.		60
148.		65	27.		185
278.		26	280.		8
92.		24	149.		65
80.		40	381.	74	84
1.	54	47	198.		25
78.	1	45	376.		16
77.		114	324.		81
43.	89	1	65.		9
841.		22	489.		12
126.		22	286.		86
255.		24	368.		45
58.	31	1	221.		125
284.	4	12	28.		95
837.	189		190.		9
55.	1	87	270.	89	31
894.	2	6	88.	2	44
63.		7	72.		21
161.	19	18	164.	92	44
61.		272	285.		8
289.		108	348.		94
196.		24	308.		17
809.		30	298.		6,621
91.	56		143.		
818.		23			

DEC. 1903

THE ELECTRICAL WORKER

THE NEXT MEETING PLACE.

Following is the vote by referendum for next convention city:

FOR LOUISVILLE.

Local No. 107	Local No. 331	Local No. 286
238	260	492
398	212	78
154	21	298
216	149	369
432	98	392
143	192	235
325	194	14
10	205	243
42	53	290
240	227	277
113	176	411
439	162	145
20	134	209
191	287	246
80	109	217
170	359	397
11	326	5
358	32	2
245	261	174
101	160	44
4	179	409
295	6	97
237	166	311
199	218	7
313	203	324
144	121	193
327	77	86
31	24	280
59	26	269
22	343	189
364	274	341
54	401	70
112	135	220
17	126	84
185	288	104
321	55	118
142	390	49
173	63	339
296	61	393
30	283	99
278	196	73
87	303	177
146	88	83
74	28	90
Total, 135.		

FOR EL PASO.

Local No. 60	Local No. 66	Local No. 72
253	132	270
241	306	221
108	156	29
62	198	406
65	292	316
376	254	370
275	249	200
116	12	133
262	284	40
27	338	197
279	368	43
381	16	122
272	114	356

Local No. 436	Local No. 41	Local No. 294
56	337	214
423	92	69
45	255	233
24	360	211
139	394	299
81	340	268
115	346	8
265	164	
Total, 68.		

NOTICE.

We are pleased to announce that Local 16, of Evansville, Ind., has won its strike after a good, stiff fight. They had the good fortune to keep all men in line, with the exception of one, Edward Piper, card number 44286. This man scabbed against the Local, and they have fined him \$5 a day for each day he worked. Locals will please pass this Piper along until he makes good with Local 16.

CHARTERS GRANTED IN NOVEMBER.

No. 289, Oakland, Cal.

425, Wilmington, Del.

51, Monclova, Coahuila, Mexico.

INSIDEMEN are requested to keep away from Hartford, Conn., as there is a strike on.

THE new constitutions are now ready and can be procured for five cents per copy.

Grand Secretary's Report for November.

No.	P. C.	Int.	Sup.	But.	Totals.
1	108 40	82 00	1 50		126 90
2	81 60	28 00			107 60
3	427 20	26 00			468 20
4	12 40	2 00			14 40
5	158 80		5 00		163 80
7	16 20	2 00			18 20
8	25 00				25 00
9	125 40	30 00			155 40
10	85 60	4 00	40		40 00
11	16 80				16 80
12	12 00				12 00
14	48 00	24 00			72 00
15	12 40			75	18 15
16	9 80	2 00			11 80
17	41 40	8 00	4 75	1 00	55 15
18	40 60	4 00			44 60
19	8 80				8 80
20	25 80	6 00			31 80
22	7 40	2 00	1 00		10 40
23	24 40	10 00	6 50		40 90
24	59 60	2 00	1 00		62 60
25	12 00	2 00			14 00
26	24 80				24 80
27	29 40	12 00	2 00		43 40
28	29 60	6 00			35 60
29	20 00	4 00			24 00
30	16 40				16 40
31	17 40	6 00	2 50		25 90
32	24 80	6 00			30 80
33	7 40	2 00	50		9 90
34	2 60		5 00		7 60
35	40 00	15 00	4 75		58 75
37	24 60	6 00			30 60

No.	P. O.	Int.	Sup.	But.	Totals.	No.	P. O.	Int.	Sup.	But.	Totals.
88	49 80	10 00			59 80	160	16 60				70
89	52 80	10 00	50		68 80	161	7 60	2 00			16 65
40	9 20	2 00			11 20	163					9 60
41	32 60	2 00	1 00		35 60	164	85 40		50		86 90
42	15 20	2 40			17 20	167	4 20				4 20
44	13 60	1 00			14 60	168	1 80	2 00			3 80
45	26 00	10 00			36 00	169	38 40		50		38 90
47	16 40	4 00	18 75		39 15	170			2 00		2 00
49	25 00				25 00	171	11 00			25	11 25
50	15 40	10 00			25 40	172	8 40	2 00			10 40
51	6 40	7 00	8 50		21 90	173	8 60				8 60
52	70 60	12 00			82 60	174	10 40				10 40
53	7 40	8 00			15 40	176	11 60	8 00			19 60
54	18 40	2 00	2 25		17 65	177	8 40	6 00			9 40
55	18 00	6 00	1 00		26 00	179	10 20				10 20
56	14 00	4 00			18 00	181	10 20	4 00	1 00		15 20
57	28 20	4 00			32 20	183	7 40	2 00	4 00		18 40
58			1 00		1 00	186	82 00	8 00	1 25		41 25
59	10 00	6 00	25		16 25	187	8 00	4 00			12 00
60	22 40	6 00	4 50		32 90	189	9 40	2 00	1 87		13 27
61	48 40	4 00	8 25		50 65	190			3 75		8 75
62	13 80	8 00	1 60		28 90	191	6 80	2 00	5 00		18 80
63	8 40				8 40	192	8 80				8 80
64	5 00	6 00			11 00	193	18 40	2 00	75		21 15
66	22 20	12 00	6 50		40 70	194	10 80				10 80
69	8 40		4 20		12 60	197	14 40	2 00			16 40
70	11 80	2 00	1 00		14 80	201	2 80				2 80
71			1 00		1 00	202	1 40				1 40
73	25 60	12 60			37 60	203	80		1 50		2 80
75	14 20	4 00			18 20	204	11 20	2 00			18 20
77	27 00	4 00			31 00	205	16 40	6 00	1 50		23 90
78	10 00				10 00	208	9 20				9 20
79	17 40	2 00			19 40	209	4 20				4 20
82	1 40	8 00			9 40	210	8 40	8 00		1 00	17 40
83	17 60	4 00			21 60	212	88 60	8 00			41 60
84	21 20	18 00	25		39 45	218	17 00	2 00			19 00
87	15 60	4 00	2 00		21 60	214	9 20	6 00			15 20
88	5 40	4 00	25		9 65	215	8 40		1 00		4 40
90	17 80	2 00			19 80	216	4 20				4 20
91			1 00		1 00	217	19 60	4 00			28 60
92	1 60				1 60	219	8 00				8 00
95	6 40				6 40	220	8 40	2 00	25		10 65
96	9 00	2 00	1 50		12 50	224	16 80	8 00			19 80
97	2 40		25		2 65	225	7 60				7 60
98	77 40	2 00			79 40	226	1 60				1 60
99	11 00	8 00			19 00	227	17 00	18 00			85 00
101	2 00				2 00	228	1 40	4 00			5 40
103	43 00	6 00	80		49 80	229	10 60		1 00		11 60
104	25 80		1 00		26 80	234	18 00				18 00
105	8 80	6 00	50		9 80	235	57 00	6 00			48 00
106	8 80				9 10	236	8 80	4 00	1 75		14 55
107	7 20		75		7 95	237	18 60	4 00			22 60
109	4 40				4 40	238	8 20	4 00			7 20
110	2 20				2 20	239	4 40		4 25		8 65
111	6 60				6 60	240	15 00	2 00			17 00
112	22 20	2 00			24 20	241	2 00	2 00			4 60
118	8 80				8 80	242	5 00				5 00
114	11 60	1 00			12 60	248	2 80	6 00			8 80
115	2 00				2 00	246	7 00				7 00
116	29 00	2 00	1 00		82 00	247	110 00				110 00
117			2 75		2 75	249	7 00				7 00
118	15 80	14 00			29 80	250	12 60				12 60
119	10 60	4 00			14 60	252	11 20				11 20
121			1 00		1 00	254			5 75		5 75
122	16 20		5 25		21 45	258	16 80		1 00		17 80
123	4 40				4 40	260	17 60		25		17 85
127	8 60				8 60	261	20 00	8 00	50		28 50
128	6 60	4 00			10 60	262		2 00			2 00
131	7 00				7 00	264	5 60				5 60
133	17 80	4 00			21 80	265	20 00	18 00	2 00		40 00
134	82 80	116 00			437 80	268	11 40		75		12 15
135	4 80				4 60	269	4 60	2 00	25		6 85
136	14 00	6 00	8 75		28 75	270	19 60	4 00	4 75		28 85
138	11 40				11 40	271	12 00	2 00			14 00
139	14 80	4 00	1 00		19 80	272	7 20	2 00			9 20
140	14 40	6 00			20 40	273	6 40				6 40
141	10 00				10 00	274	6 20		50		6 70
142	10 00		2 00		12 00	275	4 40	2 00	1 50		7 90
143	9 20		2 00		11 20	276	4 40	2 00			4 40
145	9 00	2 00			11 00	277	8 20				5 20
147	20 40	8 00			28 40	278	10 80	4 00			4 00
149	21 20	10 00			81 20	280			1 00		11 80
150	9 80				9 80	282			4 00		4 00
151	50 40	8 00			58 40	284	4 00	6 00	1 00		11 00
154	8 60				8 60	286	7 60	2 00			9 60
155	8 80	6 00			14 80	288	4 20				4 20
157	4 00	2 00			8 00	289			1175		11 75
159	8 40				8 40	290	2 40	8 00	8 00		18 40

THE ELECTRICAL WORKER

No.	P. C.	Int.	Sup.	But.	Totals.	No.	P. C.	Int.	Sup.	But.	Totals.
292	11 00	2 00			18 50	425	1 80				9 25
294	2 80				2 80	428	5 00				1 80
296	2 80	1 00	2 25		5 85	429	2 20	2 00			5 00
297	2 80		50		3 30	430	3 40				4 20
298	23 80	2 00	1 50		27 30	431	5 40				3 40
299	14 60				14 60	432	4 00				5 90
300	18 20	12 00			26 20	433	5 40		50		6 90
302	6 20				7 70	434	6 00		50		5 00
303	2 40				2 40	435	5 00				5 20
304			50		50	437	5 20				5 20
306	26 00		90		26 90	438	29 60	100 00			188 60
307	9 00				9 00	439	3 20				3 20
308	5 00				5 00	440	5 20	3 00	2 00		10 20
309	7 40	2 00	2 50		11 90	441	2 20	4 00			6 20
310	4 40		1 50		5 90	442	2 80	4 00			10 80
311	4 80		50		5 80	443	1 60	1 00			2 60
312	4 40	4 00	31		8 71	445	5 00		1 25		6 25
313	15 00	2 00	75		17 75	446	5 00		12 85	1 50	18 85
314	3 40		25		3 65						
315	17 20	2 00			19 20						
316	5 40		25		5 65						
319			1 50		1 50						
324	8 20	4 00			7 20						
325	7 80	4 00	50		12 80						
326	10 00		50		10 50						
327	3 40		1 25		4 65						
331	10 20	2 00	1 00		18 20						
332	14 60	18 00			32 60						
335	6 40	2 00			8 40						
338	2 60		1 85		4 45						
339	2 20				2 20						
340	5 00	2 00	30		7 30						
341	4 60	2 00			6 60						
342	5 80		50		3 50						
345	9 20	40 00			49 20						
346	5 00		50		5 50						
350	14 80	2 00			16 80						
351	4 20	4 00			8 20						
352	6 40	2 00			8 40						
358	15 40	1 00			16 40						
355	11 80				11 80						
356	17 00	8 00	2 25		27 25						
357	6 60				6 60						
358	7 60	6 00	25		18 60						
359	8 40				8 40						
366	8 20	4 00			7 20						
367	4 80				4 80						
368	4 00				4 00						
369			25		25						
372	8 40	6 00			9 40						
375	2 60		50		8 10						
376		4 70			4 70						
378	1 80				1 80						
379	6 80	8 00			14 80						
381	15 00	2 00	25		17 25						
382	7 60	4 00			11 60						
383	6 00	6 00			12 25						
385	8 40	2 00			5 40						
388	2 60	6 00			8 60						
389	1 20				1 45						
390	9 60		12 50		21 10						
392	10 60		1 50		12 10						
393	12 60	4 00			16 60						
394	8 00				3 00						
395	2 20				2 20						
397	6 40				6 40						
398	7 40		50		7 80						
399	5 00				5 00						
400	5 00		50		5 50						
401	5 00		1 00		6 00						
403	2 60				2 60						
404	9 00	8 00			12 00						
405	1 60		2 50		4 10						
406	2 80		50		8 80						
409	2 80	4 00	1 50		8 80						
410			50	1 00	1 50						
411	6 00	4 00			10 00						
412	8 20		75		8 95						
418	1 40		25		1 65						
414	10 60	2 00			12 60						
415	1 80	20 00			24 80						
418	1 80				1 80						
418	2 60				2 60						
421	5 00				5 00						
422	5 40	2 00	1 50		8 90						
423	1 40	1 00			12 40						
424	11 60	11 00	1 00		23 60						

Grand Treasurer's Report for November.

EXPENSES.

Death claim, No. 333, Geo. R. Moore....	\$100 00
Death claim, No. 334, R. F. Cochran....	100 00
Death claim, No. 335, Chas. W. Earl....	100 00
Death claim, No. 336, Wm. Warren....	100 00
Death claim, No. 337, F. T. McClellan....	100 00
Death claim, No. 338, J. P. Stewart....	100 00
Death claim, No. 339, Nick Biersh....	100 00
Death claim, No. 340, Angus McLean....	100 00
Death claim, No. 341, N. Wright....	100 00
Chas. Nelson, expenses to A. F. of L. convention,.....	200 00
Geo. Burns, expenses to A. F. of L. convention.....	217 33
F. Estinghausen, expenses to A. F. of L. convention,.....	126 50
H. W. Sherman, expenses to A. F. of L. convention,.....	125 25
E. P. Allman, expenses to Massillon, O.	23 70
F. E. Lockman, strike benefit No. 4, New Orleans.....	41 00
M. J. Sullivan, general expenses.....	265 55
C. A. Eaton, convention expenses.....	6 00
L. Foss, Sergeant at Arms, convention, Salt Lake City.....	27 00
W. J. Gildsor, general expenses.....	200 00
S. B. French, expenses to N. B. T. Council Convention.....	15 00
F. J. McNulty, expenses to San Francisco.....	136 90
E. T. Mallory, expenses to Hartford, Conn.....	45 63
F. J. Sweek, general expenses.....	100 00
E. C. Loomis, org. 446, Columbus, Ohio.....	10 00
E. Morrison Co., office supplies.....	23 20
Sudwarth Printing Company, printing supplies.....	465 35
H. E. Wilkens Printing Company, printing Electrical Worker.....	1,171 87
H. E. Wilkens Printing Company, printing General Office supplies	17 50
Clark & Smith, check books.....	14 80
F. J. McNulty, salary for October and November	382 00
H. W. Sherman, salary for November.....	166 00
M. K. Clinton, salary, four weeks.....	72 00
F. F. Brown, salary, four weeks.....	52 00
B. B. Goebel, salary, four weeks.....	40 00
B. H. Goldsmith, salary, four weeks.....	40 00
L. Jackson, salary, four weeks.....	40 00

Dec. 1903

A. E. Malone, salary, for weeks.....	40 00
Rent.....	30 00
Janitor.....	8 00
Mailting Worker.....	79 52
Postage.....	62 00
Office supplies.....	2 55
Telegrams.....	14 51
Express.....	24 88

5,129 64

RECAPITULATION.

Amount on hand November 1, 1903.....	14,778 22
Receipts for November.....	6,907 80
	21,681 02
Expenses for November.....	5,129 64

Amount on hand December 1, 1903..... 16,551 38

Fraternally submitted,

F. J. SHEEHAN,
Grand Treasurer.

FROM OUR GRAND PRESIDENT.

As per the instructions of the convention and Executive Board Brother Sherman and your humble servant went to the "Pacific Coast" to assist the Western Conference in settling the trouble that existed between our locals and the Pacific States Telephone and Telegraph Company.

The Labor Commissioner of the State of California, who is also the legal adviser of Local No. 151, arranged for a meeting with the company's officials for us the day after we arrived in San Francisco.

At this meeting nothing was accomplished.

We were told that nothing would be done unless we called the trouble off.

Then, we were informed, the company would take up the grievance of each local separately.

This we refused to do, as we were given an assurance that we would get any concessions at all.

In the meantime our active workers were hard at work, and through the efforts of them and some prominent labor leaders of San Francisco, the influence of three prominent political leaders (one of them a candidate for mayor of San Francisco), were brought to bear on the company in our behalf.

A meeting was arranged for us by the aforesaid to meet the officials of the company to settle the trouble. Before they would consent to meet us we had to agree to settle on a \$3 minimum wage scale, and cut out the clause which called for the reorganization of the union.

The following was agreed upon after several meetings:

1. The minimum wage scale for journeymen linemen throughout the territory covered by the P. S. T. T. Company shall be three (\$3) dollars per day.

2. Eight hours shall constitute a day's work--from 8 o'clock a. m. till 12 o'clock noon, and from 1 o'clock p. m. till 5 o'clock p. m.

3. First-class apprentice linemen shall receive two dollars and fifty cents per day, (\$2.50).

4. All patrolmen, repairmen, linemen and apprentice linemen shall be paid for all overtime at the rate of time and one-half.

5. Not more than one apprentice lineman shall be allowed to four journeymen linemen.

6. When men are sent out of town to work they shall receive their regular scale of wages, and expenses up to and including ten days, after which time they will pay their own expenses.

7. All men who were receiving the minimum wages (\$3 per day,) shall receive the same wages they formerly received when they return to work.

8. All journeymen linemen working in country gangs will receive the same pay as when working in the city and pay their own expenses; or will be paid two (\$2) dollars per day, and the company pay the expenses.

9. If men are detained after quitting they shall be paid overtime as specified.

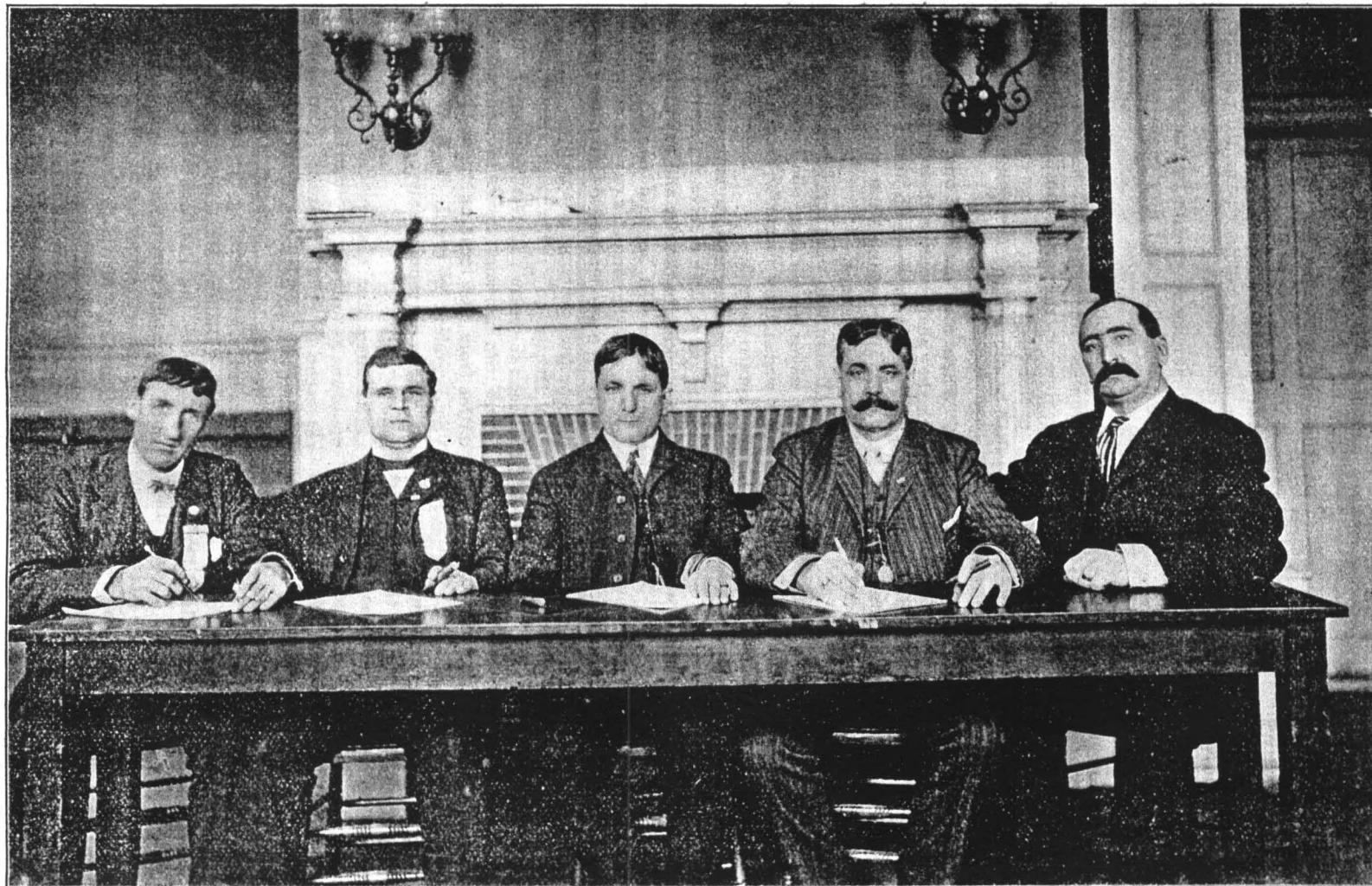
10. In case any differences should arise between the men and the company in the future, the company agrees to meet a committee from the local union, or the Grand Vice-President of the I. B. E. W. of the district, or his representative, to adjust the same.

The committee that reached the settlement was as follows: Brother Jack Walters, representing the Western Conference; Brother M. J. Sullivan, G. V. P. of, and representing the Seventh District, and yours truly, representing the Brotherhood; Mr. John I. Sabin, Mr. Glass, and Mr. Stice representing the Pacific States Telephone and Telegraph Company.

After the settlement I sent a personal letter of thanks to Mr. H. J. Crocker for using his influence in our behalf.

If there is any credit to be given for the settlement, it belongs to the executive committee of the Western Conference, and th

Dec. 1903



James J. Reid.

George Burns.

H. W. Sherman.

Charles Nelson.

Frank Estinghausen.

DELEGATES TO A. F. OF L. CONVENTION.

brothers that worked so hard throughout the trouble for the interests of our Brotherhood.

There are some names I would like to mention in this respect, but will not, for reasons that you all know—it would cause dissatisfaction. I believe every man did his best, with a few exceptions.

On October 6 Brothers Holden, Vice-President Sullivan and I left San Francisco to visit every local affected to explain the settlement to each and see that it was lived up to by the party of the second part. We attended meetings of the following locals, in the order named: Local No. 250, San Jose; No. 151, San Francisco; No. 61, Los Angeles; No. 428, Bakersfield; No. 169, Fresno; No. 207, Stockton; No. 36, Sacramento, and No. 371, Redding, Cal.; No. 125, Portland, Oregon; No. 76, Tacoma; No. 77, Seattle; No. 191, Everett, and No. 73, Spokane, Washington.

While in Los Angeles, along with a committee of Local No. 61, we settled with the "Home" Company on the same terms as with the Pacific States.

It was impossible to visit any of the locals other than the above mentioned, as we had to get back to San Francisco as soon as possible, with the exception of locals No. 6, No. 283, No. 298 and No. 116. We found them in very good shape, excepting Local 116, of Los Angeles, which has fallen off in membership from over one hundred to about twenty-five. This was caused by the failure of the strike of last year. The old standbys are still holding on, and fighting against big odds.

Brother Sullivan intends to go there in the near future and assist them in putting the local on good footing again.

In our travels around to the various locals we found a great deal of dissatisfaction, caused by the local managers, in each city.

I am pleased to state that we got everything fixed up in each place, and every one was satisfied before we left.

Our hardest fight was on behalf of the girls of Spokane. The company would not do anything at all for them at first. After three conferences the company agreed to reinstate all of them as soon as possible, and would not employ any operator until all of the girls were given a chance to return to work that wanted to.

In closing, I want to say that I do not think we will hear of any trouble between our locals on the coast and the P. S. T. T. Company for a long time.

This trouble has been the means of bringing the company and our organization in closer touch with each other, and will result in the death of unnecessary strikes in the future, and a better understanding all around.

There is one thing I feel sure of, and that is, if the conditions of the settlement are lived up to by our side Mr. John I. Sabin will see that the company lives up to their end. Still, the only safeguard for us to follow is the old and true maxim, "In time of peace, prepare for war."

Yours fraternally,

F. J. McNULTY,
Grand President.

Atlanta, Ga., December 1, 1903.

REPORT OF F. J. SWEET, G. V. P.

Editor Electrical Worker:

Arrived at Schenectady, N. Y., by order of Grand President McNulty, four of the locals there having grievances with the General Electric Company, and met Brother McNulty on arrival. We proceeded to the office of Mr. Emmans, superintendent of the General Electric works, with Brother Chas. Heffernan, of No. 252; Brother B. A. Cawley, of No. 267, and Brother Arthur E. Sparks, of No. 247. We were in session about three hours, and the settlement was satisfactory to all concerned. The same evening Brother McNulty and myself attended a meeting of No. 254. It was a good sized meeting, composed of bright, hustling men. The Grand President gave them a good, earnest talk, which seemed to do them good.

From Schenectady we went to Troy, as Local No. 392 was having trouble with some of the electric light companies, particularly the Troy Gas and Electric Company. The Grand President and myself called on the superintendent, Mr. Kail, with very little satisfaction. He did not wish to be any too fair with us or his men. The local had waited on him by committee several times with poor results, and were getting about tired. At their meeting the Grand President advised them to call a special meeting before taking a decided stand. At

the special meeting the members were very much displeased with their treatment at the hands of the superintendent of said company and were anxious to strike the next day. I advised them to appoint a committee with power to act within a certain time to meet Mr. Kail once more. They did so, and met him on the 23d and got a fairly good settlement. The local appointed Brother S. Scott to assist me in organizing the non-union men and shops in their territory. The success is more gratifying than I ever expected to meet. One instance worthy of mention is, we called at the Beacon Light Company's power house to see the men, who, by the way, were not card men. The superintendent espied us about the time we were making our most eloquent play in behalf of the good of organization. He made a gentle but emphatic request that we leave the premises. Of course, we complied, but found where the men were to work in the afternoon. We met them and got an application from each.

Thursday I will be able to leave here, but there is a great deal to do for some time to come in this district. There are several localities where new locals can be placed with great advantage.

It is reported the Tel. company intends to give the outside men a cut in Albany. If they attempt to do so there is no doubt to be trouble. I hope the report is unfounded. If strikes can be kept down at the end of two years there will be an I. B. E. W. that no company will wish to be at odds with. I, of course, mean unnecessary strikes.

Thursday I go to New York to see what can be done to improve some of our locals there. No. 20 has a small job for me. She has some wide awake members who intend to build it up to where they properly belong, at or near the top.

On the request from No. 103, of Boston, I had to vote "no," as the constitution is very plain. It gives the Executive Board no power to loan or donate money. The other request must first be reported and investigated by the organizer in the district where the trouble occurs. So I hope the members of the Brotherhood will, before they condemn any of the Board, first see if the Executive Board have power to do otherwise.

Here, in Troy, there are nine linemen

working for the Troy Street Railroad who were in the Amalgamated Street Railroad Employes Association. I made arrangements for them to come into Local No. 392, where they belong. Saw the secretary of the railroad union and notified him to that effect, so when they make the change they will receive a withdrawal card from the railroad union. I hope all the locals will see to it that they do likewise, as there are a great many cities where the trolley men are in other organizations instead of the I. B. E. W.

Wishing all success, I am,

Yours fraternally,

FRANCIS J. SWECK,

Grand Vice-President, First District.

Troy, N. Y., December 1, 1903.

CHRISTMAS TREE LIGHTING.

The trouble and difficulty incident to wiring a Christmas tree for incandescent lamps has heretofore been the only draw-



back to their use. To remedy this the General Electric Company has prepared an outfit of sockets and cord connected and completely made up and ready for immediate use. The cord is simply draped over the tree, the lamps placed in their sockets, the

connecting plug attached to the nearest electric fixture and the current turned on. All the lamps are instantly lighted and burn without further attention as long as desired. The outfit is light and flexible, thoroughly well constructed, and "fool proof."

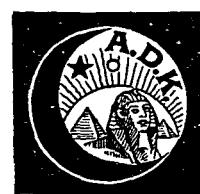
Each regular outfit comprises some fifty feet of flexible cord with tiny sockets, arranged in three branch festoons, and twenty-eight one-candle-power genuine Edison lamps in plain and colored bulbs, sufficient for the average Christmas tree. The outfit is neatly packed in a handsomely decorated wooden box, and forms a safe and charming Christmas gift for any household. Special outfits containing a larger number of sockets for large trees can be furnished when desired. The outfit is of value not only for Christmas trees, but also for general house decoration upon the table, about the walls or around columns, over the balustrade or from chandeliers—at all times and seasons. An outfit once purchased lasts for years, and can be used repeatedly with no trouble or further expense. It is believed that if the field of application for such work is investigated by those who are interested in the sale of light, current or supplies, they will find a large and growing demand for such devices as that just noted—whether for Christmas or for any other season.—Electrical World and Engineer.

HERE'S THE ADVANTAGE

of wearing your Emblem: It saves the trouble of showing your card and also gives you standing among union men. At our prices you cannot afford to be without an emblem. They are Union made. For 50c we will send No. 395, gold filled pin or button 4428. Same solid gold, \$1.00. No. 875, button only, neat and attractive, solid gold, 75c.

395 A finely finished Watch Charm, No. 4428, gold filled, \$1.50. Makes a beautiful emblem. We refund money if emblems are not satisfactory. We want agents in every lodge. Special terms and 80-page catalogue for 4c in stamp. Write to-day.

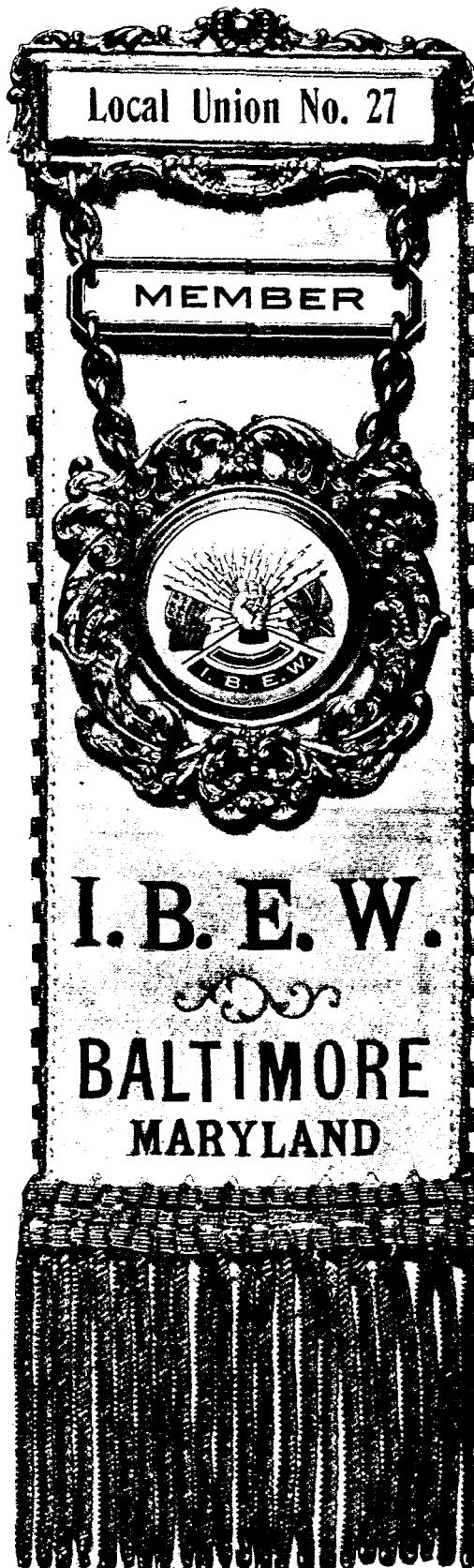
JUDSON EMBLEM CO., Room 616, 126 State St., Chicago, Ill.



ARABIAN DEGREE KLAN

7th edition. A side Degree for fun and amusement. A Burlesque. Best ever written. Everybody wants to take the Degree. Large chunks of fun in it. Brings out and increases your membership. \$5.00 for Rituals, Music, Songs and Outfit. Badges free. Send for illustrated

circulars and testimonials. Address, Dr. J. A. WAMSLEY, 19th and Diamond Sts., Phila., Pa.



Badges like above sample will be supplied by General Office, 103-104 Corcoran Bldg., Washington, D.C.

ELECTRICITY

is the topic of the hour and

“ELECTRICITY”

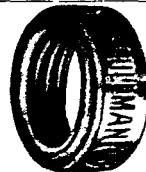
is the only one dollar a year
ELECTRICAL WEEKLY in
the world

Send for a sample copy, or better
still, mail us \$1.00 for a
year's subscription

ELECTRICITY NEWSPAPER CO.

136 Liberty Street • New York

Brass
Bushings



Steel
Locknuts

“Quality”



Both
Made

To
Fit

THE WORKMAN SAYS:

“I lose no patience now. Half the old
kind were misfits.”

THE CONTRACTOR SAYS:

“Since I began using these my bills are
cut in half. No faulty ones to throw away.”

A GOOD UNION MAN

Will do his work well—and easily, if he
can. With these clean-cut Bushings and
Locknuts

HE DOES IT GOOD
AND DOES IT EASY

Small

Strong

Sure

Smooth

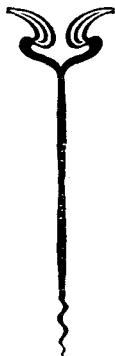


THE FULLMAN CO.

Pittsburg : : : : Pennsylvania

BUILD YOUR OWN

Electric Motors
Small Dynamos
Voltmeters
Ammeters
Storage Batteries
Arc Lamps
Induction Coils
Condensers
Nernst Lamp
Telephones



COMPLETE DIRECTIONS AND WORKING DRAWINGS

for 34 Different Pieces of Electrical Apparatus in Our Book of
"ELECTRICAL DESIGNS"

262 Pages, 289 Illustrations Price, Postpaid, \$2.00
Send for our Large Catalogue of Engineering Books

The BEST ELEMENTARY BOOK ON PRACTICAL ELECTRICITY

Is by GEO. D. SHEPARDSON, M. E., *Prof. of Electrical Engineering
in the University of Minnesota*

Its title is "THE ELECTRICAL CATECHISM." It contains 450
pages, 325 illustrations and covers 1,200 topics

The book puts into concise and accessible form reliable answers
to many of the questions that are being asked continually about the
theory and applications of electricity. It may be used as an introduc-
tion to the more formal treatises, and will furnish the beginner
with a fund of general information which will throw much light
upon subsequent study of more advanced text-books. The general
reader will find it a convenient hand-book of reference for non-
technical explanations.

Price, Postpaid - - - - - **\$2.00**
Send for our large catalogue of electrical and engineering books

McGraw Publishing Co.

114 Liberty Street, New York

AN INVITATION FROM ROCHESTER, N. Y.

To any who may be planning to make this city their future home we extend a cordial welcome. We place at your service the facilities of two large stores to supply any want, however small it may be, in Furniture or House Furnishings. Come and look at your leisure, make yourself at home, and rest assured that better values cannot be found anywhere else in town.

THE POPULAR FURNITURE HOUSE,

WEIS & FISHER CO.,

116-118 STATE STREET, TWO STORES. 441-445 Clinton Avenue, N.
ROCHESTER, N. Y.

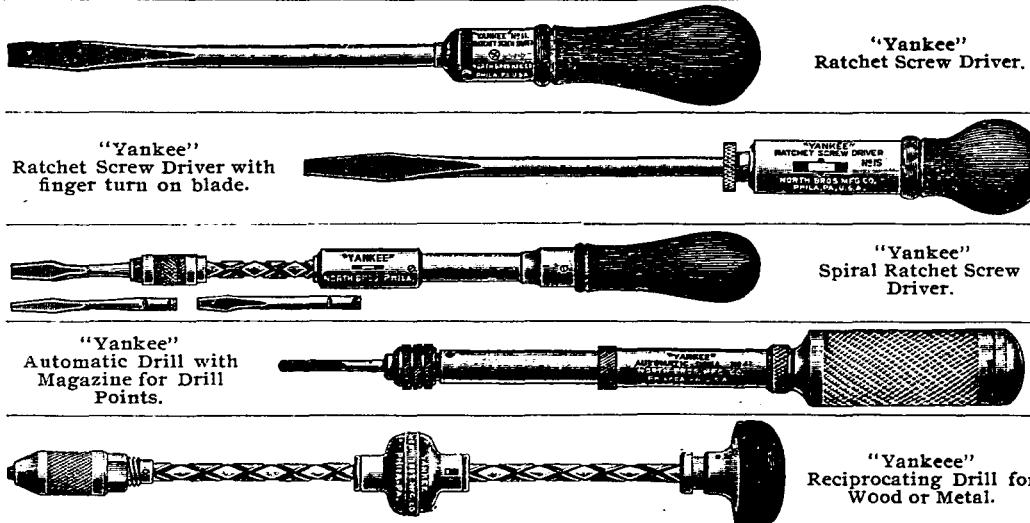
“YANKEE” TOOLS

Are the newest, cleverest and most satisfactory in use, and the first to be offered at so reasonable a price that every up-to-date mechanic could buy tools of their quality and character.

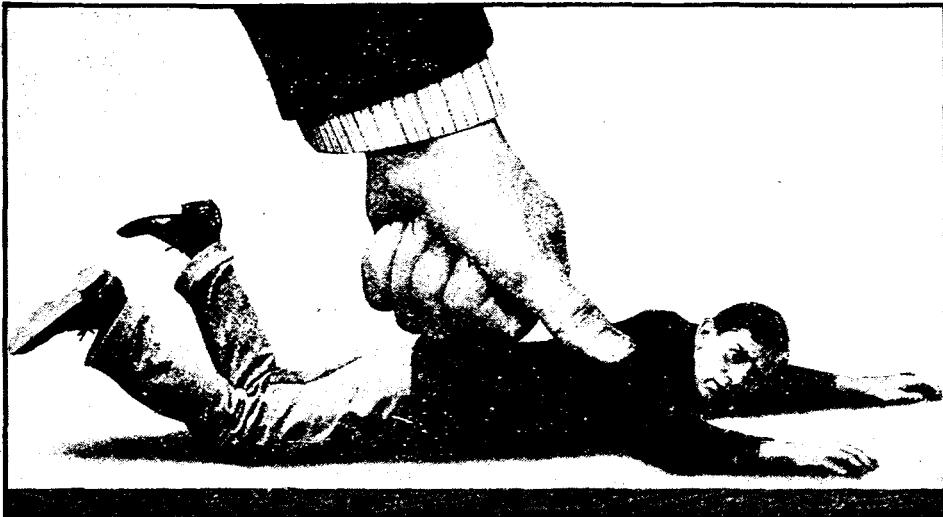
Other tools are very good tools, but “Yankee” Tools are better.

“Yankee” Tools are sold by all leading dealers in tools and hardware everywhere.

Ask your dealer to see them.



Our “Yankee” Tool Book tells all about these and some others, and is mailed free on application to
North Brothers Manufacturing Co., Lehigh Ave. and American St.
PHILADELPHIA, PA



Are You Held Down By Lack of Training?

Nothing keeps a man down like lack of training—nothing lifts him up so quickly or so surely as a thorough, practical knowledge of the work he has to do. The International Correspondence Schools were founded for the "man without an opportunity." No matter where he is or what work he is doing, they give him, *by mail*, the exact training required to attain success, either in his present position, or in an entirely different occupation.

We can prepare you for any of the positions named below. You will not have to give up your present employment, as only a small amount of your spare time is required. Prices low. Terms easy. No books to buy.

Mark **X** before the position which interests you; cut out Coupon and mail to us. We will send full particulars and our booklet, "1001 Stories of Success," which gives the names, addresses, and advancement of over a thousand of our students in all parts of the world.

Send in the Coupon Today!

International Correspondence Schools,
BOX 1029, SCRANTON, PA.

◆ Please send me your booklet "1001 Stories of Success," and explain how I can qualify for the position before which I have marked **X**.

Building Contractor	Electrician	Municipal Engineer	Show-Card Writer
Architect	Elec.-Lighting Supt.	Bridge Engineer	Ad Writer
Mechanical Engineer	Elec.-Railway Supt.	Railroad Engineer	Analytical Chemist
Machine Designer	Telephone Engineer	Surveyor	Sheet-Metal Drafts.
Mechanical Draftsman	Telegraph Engineer	Mining Engineer	Ornamental Designer
Foreman Machinist	Wireman	Textile-Mill Supt.	Navigator
Foreman Toolmaker	Dynamo Tender	Textile Designer	Bookkeeper
Foreman Patternm'k'r	Motorman	Sanitary Engineer	Stenographer
Foreman Molder	Steam Engineer	Heat, and Vent. Eng.	To Speak French
Refrigera'n Engineer	Marine Engineer	Contractor and Build.	To Speak German
Electrical Engineer	Civil Engineer	Arch. Draftsman	To Speak Spanish
Elec. Mach. Designer	Hydraulic Engineer	Sign Painter	Commercial Law

◆ *Name* _____ *Age* _____

◆ *Street and No.* _____

◆ *City* _____ *State* _____

DIRECTORY OF UNIONS

TAKE NOTICE!

This Directory is compiled from the quarterly reports furnished by local secretaries. If your local is not properly classified, it is because no report, or an imperfect one, has been furnished. Local secretaries should promptly report any changes.

Locals are composed of branches of the trade, as per the following signs:

* Mixed. † Linemen. ‡ Inside Men.
‡ Trimmers. § Cranemen. || Cable Splicers.
° Switch-board Men. ¶ Shopmen.

† No. 1, St. Louis, Mo.—Meets every Tuesday night at 8 o'clock at Lightstone's Hall, 1028 Franklin avenue. President, H. Parks 3931 N. Twentieth street; recording secretary, Bertram G. Christie, 4342 Kennerly avenue; financial secretary, H. Ellison, 1028 Franklin avenue.

† No. 2, St. Louis, Mo.—Meets Saturday evenings at Electrical Worker's Hall, 1028 Franklin avenue. President, A. Zadwitz, 1905 Ferry street; recording secretary, Jas. Noonan, 3711 La Salle street; financial secretary, John Kline, 1028 Franklin avenue.

† No. 3, New York.—Meets Tuesday and Thursday nights at Brevoot Hall, 154 East Fifty-fourth street. President, F. J. Sweek, 507 E. Fifty-fifth street; recording secretary, Geo. Whitford, 441 East Eighty-third street; financial secretary, M. R. Jarvis, 154 East Fifty-fourth street.

† No. 4, New Orleans, La.—Meets first and third Wednesday evenings at Room No. 2 Odd Fellows Hall, Camp street, between La Fayette and Poydras. President, John H. McLin, 2328 First street; recording secretary, Jacob Seibert, 2741 Conti street; financial secretary, Robert L. Reilly, 2908 Annunciation street.

† No. 5, Pittsburg, Pa.—Meets every Friday at Electrical Workers' Hall, 302 Grant street. President, T. S. Connelly, 302 Grant street; recording secretary, J. S. Haskins, 302 Grant street; financial secretary, H. Oakland, 302 Grant street.

† No. 6, San Francisco, Cal.—Meets Wednesday night at Alcazar building, 120 O'Farrell street. Headquarters, 27 Sixth street. President, R. G. Alexander, 222 Eddy street; recording secretary, Robt. A. Simons, 518 Diamond street; financial secretary, J. A. De Vecmon, 27 Sixth street.

*** No. 7, Springfield Mass.**—Meets every Monday at Room 219, Court Square Theater building. President, W. F. Kavanaugh, 221 Sumner street; recording secretary, George D. Beecher, 81 Tyler street; financial secretary, E. S. Thurston, 715 Worthington street.

† No. 8, Toledo, Ohio.—Meets Monday of each week at Friendship Hall, cor. Jefferson and Summit. President, T. R. Davis, 804 Dorr street; recording secretary, G. H. Snyder, 410 Sherman street; financial secretary, M. C. Luttenberger, 423 Floyd avenue.

† No. 9, Chicago, Ill.—Meets every Saturday night at 196-198 E. Washington street. President, Henry Cullen, 80 Aberdeen street; recording secretary, Jas. L. Collins, 5907 La Salle street; financial secretary, N. Rousseau, 5938 Normal avenue.

*** No. 10, Indianapolis, Ind.**—Meets every Monday at Morrison's Hall, Circlestreet. President, C. A. Sales 1101 River avenue; recording secretary, J. C. Davis, 433 N. Capitol avenue; financial secretary, F. E. Swift, 729 S. Delaware street.

*** No. 11, Waterbury, Conn.**—Meets every Friday at Carpenters' Hall, Schlitz bldg., Main street. President, P. J. Horigan, New street; recording secretary, G. H. Jenkins, 177 Bank street; financial secretary, R. McKensie, 89 So. Main street.

*** No. 12, Pueblo, Colo.**—Meets every Friday evening at Trades' Assembly Hall, Main street, between Third and Fourth streets. President, C. C. E. Emery, P. O. Box 57; recording secretary, H. G. Brown, P. O. Box 70; financial secretary, G. R. Johnson, P. O. Box 70.

*** No. 13, El Paso, Tex.**—Meets first four Mondays of each month at Masonic Temple. San Antonio

street. President, C. A. Gilbert, Box 620; recording secretary, S. A. Milliron, Box 620; financial secretary, J. Blake, Box 620.

† No. 14, Pittsburg, Pa.—Meets every Thursday night at Electrical Workers Hall, 302 Grant street. President, John Scanlon, 302 Grant street; recording secretary, S. D. Young, 302 Grant street; financial secretary, F. J. Willenpart, Upton, near Watt streets.

*** No. 15, Jersey City, N. J.**—Meets first and third Fridays of each month at Filer's Hall, 381 Palisade avenue. President, Peter Sorensen, 361 Palisade avenue, Jersey City; recording secretary, J. J. Byrne, 1314 Washington street, Hoboken; financial secretary, A. H. Wilson, 1218 Park avenue, Hoboken.

*** No. 16, Evansville, Ind.**—Meets every Thursday night at Private Hall or rooms, 313½ Upper Third street. President, E. L. Mitchell, 608 Upper Eighth street; recording secretary, E. E. Hoskinson, 925 E. Indiana street; financial secretary, L. Ed Wilkes, 608 Washington avenue.

† No. 17, Detroit, Mich.—Meets every Monday evening at Johnson's Hall, 34 Monroe avenue. President, Chas. R. Lapworth, 955 Merrick avenue; recording secretary, E. G. Smith, 439 Elmwood avenue; financial secretary, F. W. Stuenvoll, 90 Noble street.

† No. 18, Kansas City, Mo.—Meets every Tuesdays evening, at 1888 Grand avenue. President, J. T. Byars, 1819 Norton street; recording secretary, S. C. Harrington, 120 Penn street; financial secretary, Neil Callahan, 1224 Monroe avenue.

*** No. 19, Atchison, Kans.**—Meets second and forth Fridays, Labor Union Hall, Seventh and Commercial streets. President, J. F. Costellow, Atchison Light Co.; recording secretary, O. B. Gilmore, 614 N. Sixth street; financial secretary, N. H. Coleman, 728 R street.

† No. 20, New York City.—Meets every Tuesday night at Military Hall, 198 Bowery. President, P. McLaughlin, New York avenue and Winthrop street, Brooklyn; recording secretary, F. Curtin, 198 Bowery; financial secretary, T. J. Convery, 198 Bowery.

*** No. 21, Philadelphia, Pa.**—Meets every Friday at Elks' Hall, 232 North Ninth street. President, H. C. McClanahan, 500 Race street; recording secretary, Ed. Ferry, 841 East Churchlane street; financial secretary, R. E. Collier, 1230 Ogden street.

† No. 22, Omaha, Nebr.—Meets first and third Wednesdays of each month at Labor Temple, Fifteenth and Dodge streets. President, Chas. Granden, 1502 N. Nineteenth street; recording secretary, H. P. Kerr, 2245 N. Nineteenth street; financial secretary, J. Corr, 4123 No. Twenty-fourth street.

*** No. 23, St. Paul, Minn.**—Meets first and third Mondays at Federation Hall, Third and Wabasha streets. President, W. F. Schoeneman, 1111 Goff avenue west, St. Paul; recording secretary, C. W. Berryman, 650 Rice street; financial secretary, H. H. Tubbersing, 447 West Central avenue.

† No. 24, Minneapolis, Minn.—Meets second and fourth Tuesdays at Union Temple, 26 So. Washington avenue. President, L. Foss, 616 Nineteenth avenue, south; recording secretary, Frank Flanagan, 48 Fourth street, south; financial secretary, J. J. Reynolds, 2316 Fourth avenue, south.

*** No. 25, Terre Haute, Ind.**—Meets every Thursday day at C. L. U. Hall, 626 Wabash avenue. President, W. C. Ellius, 1220 College street; recording secretary, Joseph Herbert, 403 S. Eighth street; financial secretary, Lee Dickerson, 509 S. Thirteenth street.

† No. 26, Washington, D.C.—Meets every Thursday, corner Sixth and G streets, N.W. President, E. Nothnagel, 1415 5th street, Northwest; recording secretary, S. F. Adams, 724 Eighteenth st. Northwest; financial secretary, A. Longprey, 1339 Eighth st., Northwest.

*** No. 27, Baltimore, Md.**—Meets every Monday evening at Border State Bank building, Park avenue and Fayette street. President, A. Rutledge, 716 St. German street; recording secre-

tary, G. W. Spillman, 1219 Carroll street; financial secretary, J. Connelly, 1728 N. Bond street.

†No. 28, Baltimore, Md.—Meets every Thursday at 8 p. m. at 508 East Baltimore street. President, W. W. Davis, 505 N. Monroe street; recording secretary, W. S. Derden, 1120 N. Carey street; financial secretary, Geo. J. Schmidt, 241 Milton avenue.

*No. 29, Trenton, N. J.—Meets every Tuesday evening at Ribsam building, corner Front and Broad streets; fourth floor; take elevator. President, Geo. Proffat, 333 Academy street; recording secretary, J. Lloyd Trask, 165 E. Frontstreet; financial secretary, F. L. Morris, 223 N. Broad street.

†No. 30, Cincinnati, Ohio.—Meets every second and fourth Wednesday at Cosmopolitan Hall, 1313 Vine street. President, Virgil Burbridge, 1737 Denham street; recording secretary, Fred Seidel, 2822 Harrison avenue; financial secretary, C. A. Palmer, 4222 Cherry street.

*No. 31, Duluth, Minn.—Meets first, third and fifth Thursdays at Bricklayers' Hall, 221 West Superior street. President, E. A. Nelson, Duluth; recording secretary, C. W. Higgins, 418 8th ave. west; financial secretary, W. L. Otis, 114 South 15th ave., east.

*No. 32, Lima, Ohio.—Meets first and third Tuesdays at Donze Hall, South Main street. President, Harry Davidson, S. Jackson st.; recording secretary, W. C. Holmes, 110 Harrison avenue, Lima, Ohio; financial secretary, E. Kraus, 308½ E. Wayne street, Lima.

*No. 33, New Castle, Pa.—Meets every Wednesday night at G. A. R. Hall, corner of East and Washington streets. President, John G. Davis, 53 Walnut street; recording secretary, F. D. Kingsley, 68 Pearson street; financial secretary F. L. Runkle, 359 Cunningham avenue.

†No. 34, Peoria, Ill.—Meets first and third Mondays at Pettit's Hall, 209 Liberty street. President, Geo. Akers, 1803 Lincoln avenue; recording secretary, R. W. Marlatt, 188 Irving street; financial secretary, E. Peek, 516 N. Perry avenue.

*No. 35, Massillon, Ohio.—Meets second and fourth Wednesdays at Trades' and Labor Assembly Hall, McAymonds Block. President F. F. Flickinger, 188 Richville avenue; recording secretary, R. S. Hardgrove, 22 E. Charles street; financial secretary, A. Shorb, 332 West Tremont street.

†No. 36, Sacramento, Cal.—Meets Friday night at 1019 J street. President, F. O. Hutton, 2026 M street; recording secretary, W. H. Eastman, 918 K street; financial secretary, J. Noonan, 1120 Twentieth street.

*No. 37, Hartford, Conn.—Meets every Thursday in Foster Block, Room 10, corner Asylum and Ann streets. President, J. W. Condon, 32 Lewis street; recording secretary, James Lynch, 32 Allyn street; financial secretary, Maurice Colins, 32 Allyn street.

†No. 38, Cleveland, Ohio.—Meets every Tuesday at Foresters' Hall, 223 Champlain street. President, R. W. McIntyre, 176 Lakewood avenue; recording secretary, Wm. J. Young, 390 Prospect street; financial secretary, Frank Estinghau- sen, 88 Prospect street.

*No. 39, Cleveland, Ohio.—Meets every Thursday at Arch Hall, 398 Ontario street. President, Dan Stevens, 78 Irvington street; recording secretary, Geo. H. Gleason, 83 Prospect street; financial secretary, Frank J. Sullivan, 83 Prospect street.

*No. 40, St. Joseph, Mo.—Meets Wednesday at A. O. U. W. Hall, 8th and Locust streets. President, Charles A. Waller, City Plant, Fifth and Olive streets; recording secretary, Wm. Dorsel, 1710 Calhoun street; financial secretary, Chas. B. Ellis, 1205 North Third street.

†No. 41, Buffalo, N. Y.—Meets every Thursday at Council Hall, cor. E. Huron and Ellicott streets. President, G. A. Hurst, 561 Oak street; recording secretary, H. Boheme, 370 Prospect avenue; financial secretary, L. Wipperman, 164 Peach street.

†No. 42, Utica, N. Y.—Meets first and third Fridays at Labor Temple, Hotel street. President, A. Durr, 8 Louise street; recording secre-

tary, C. R. Stringer, 22 Cornelia street; financial secretary, Geo. Brinfield, 48 Cooper street.

†No. 43, Syracuse, N. Y.—Meets Fridays at Bartenders' Hall, Empire Block, West Genesee street. President, H. J. Leary, 208 McAllister avenue; recording secretary, Jas. Andrews, 518 N. Salina street; financial secretary, John Kerwin, 108 Belmont avenue.

*No. 44, Rochester, N. Y.—Meets every other Wednesday at Electrical Workers' Hall, 86 State street. President, J. L. Desmord, 288 Glenwood avenue; recording secretary, F. C. Guna- sault, 30 University avenue; financial secretary, W. C. Carroll, 120½ Monroe avenue.

†No. 45, Buffalo, N. Y.—Meets second and fourth Saturdays at Schwartz's Hall, corner Goodell and Washington streets. President, James Shane, 78 South Division street; recording secretary, C. W. Brown, 120 Demond Place; financial secretary, J. E. McCadden, 255 Seventh street.

†No. 46, Lowell, Mass.—Meets every Thursday evening at Engineers' Hall, Wyman's Ex. building, Central and Merrimac streets. President, Geo. W. Conant; recording secretary, Geo. Smith; financial secretary, G. C. Smith, 104 So. Whipple street.

*No. 47, Sioux City, Iowa.—Meets every first and third Wednesday at Room 424, Toy Block, corner Fourth and Jackson streets. President, L. Maher, 612 West Ninth street; recording secretary, F. G. Smith, 910 Douglass street; financial secretary, C. A. Biggins, 1823 Omaha street.

*No. 48, Richmond, Va.—Meets every Wednesday night at Enett's Hall, Fifth and Marshall streets. President, D. M. Page; Box 61, Richmond, Va.; recording secretary, F. A. Fry, 608½ China street; financial secretary, J. C. Wheat 1018 Taylor street.

†No. 49, Chicago, Ill.—Meets first and third Wednesdays, at Electrical Workers' Hall, 196-198 Washington street. President, Alex. McGregor, 1307 Tripp avenue; recording secretary, C. Cornell, 882 West Erie street; financial secretary pro tem, J. C. Jensen, 5841 Shields avenue.

*No. 50, Belleville, Ill.—Meets second and fourth Tuesdays at Antlers' Hall, A and Spring streets. President, Henry Christian, 103 East Main street; recording secretary, James Workman, 117 South Church street; financial secretary, F. W. Stark, 519 East C street.

†No. 51, Monclova, Coahuila Mex.—President, F. B. Wallace, Monclova, Coahuila; financial secretary, J. T. Morrison, Estacion, Monclova.

†No. 52, Newark, N. J.—Meets Monday nights at Electrical Workers' Hall, 236 Washington street. President, Adolph Raube, 109 Patterson street, Harris, N. J.; recording secretary, John J. Plunkett, 18 Kossuth street; financial secretary, Edward L. Beatty, 304 S. Ninth street.

*No. 53, Harrisburg, Pa.—Meets every Thursday at Holtsman's Cigar Store, 81 South Market street. President, George B. Ehler, 981 Myrtle avenue; recording secretary, Charles S. Eber- sole, 133 South Fourteenth street; financial secretary, Carl A. E. Andersen, 46 Summit street.

*No. 54, Columbus, Ohio.—Meets second and fourth Wednesdays at Trades' and Labor Assembly Hall, 121½ East Town street. President, William Edington, 612 West Broad street; recording secretary, D. C. Hagerty, 1100 Summit street; financial secretary, J. A. Pilger, 2488 Me- dary avenue.

*No. 55, Des Moines, Iowa.—Meets every Thursday night at Trades' and Labor Assembly Hall, between Seventh and Eighth on Locust street. President, Owlin MacCurrier, 1811 East Walnut street; recording secretary, Harry Frazy, 950 Fifth street; financial secretary, Charles Lafin, Thirty-eighth and Woodland avenue.

*No. 56, Erie, Pa.—Meets first, third and fifth Mondays at C. M. B. A. Hall, 721 State street. President, H. M. Kistner, Moore House; recording secretary, Jas. Higgins, East Fourth street; financial secretary, Jas. J. Reid, 1309 Sassafras street.

†No. 57, Salt Lake City, Utah.—Meets every Thursday evening at Electrical Workers' Hall, 11 West First street, South. President, Robert A. Guire, Box 402; recording secretary, James Gardner, 887 Constitution Block; financial secretary, Ed. Williams, Box 402.

*No. 58, Niagara Falls, N. Y.—Every Friday at Mayle Hall, 725 Third street. President, William Watis, 1629 Whirlpool street; recording secretary, H. W. Davis, 2202 Main street; financial secretary, C. P. Mingay, 1202 Center avenue.

†No. 59, St. Louis, Mo.—Meets Mondays at 8 p. m. at Lightstone's Hall, 1028 Franklin avenue. President, M. A. P. Walsh, 3962 N. Market street; recording secretary, W. D. McSorley, 1446 North twenty-first street; financial secretary, Thos. Cahill, 1331 North Jefferson avenue.

*No. 60, San Antonio, Tex.—Meets first and third Saturdays, at K. of P. Hall, Alamo Plaza. President, J. P. Brodeick, 722 South Pine street; recording secretary, W. White, City Hall; financial secretary, John Thompson, 819 Lubbock street.

†No. 61, Los Angeles, Cal.—Meets every Thursday at Council of Labor Hall, 433½ South Spring street. President, M. B. Davidson, University Station; recording secretary, G. Wardman, 342½ South Tremont street; financial secretary, S. D. Voerhees, 121 East Third street.

*No. 62, Youngstown, Ohio.—Meets first and third Tuesdays at Fin's Hall, northwest corner of Public Square. President, F. C. Fraunfelter, Commercial Hotel; recording secretary, T. P. Edmunds, 822 North avenue; financial secretary, C. A. Onstott, 618 Covington street.

*No. 63, Warren, Pa.—Meets first and third Wednesdays at D. O. H. Hall, corner Second and Liberty streets. President, John Burns, New York and Pennsylvania Tel. Co., Warren, Pa.; recording secretary, C. W. Simpson, Warren, Pa.; financial secretary, N. H. Spencer, Warren, Pa.

†No. 64, Youngstown, Ohio.—Meets Wednesdays at Finn Hall, Public square. President, David Maloney, Woodland avenue; financial secretary, W. H. Griffith, 515 Griffith street.

*No. 65, Butte, Mont.—Meets first and third Saturdays at I. O. G. T. Hall, West Broadway. President, L. E. Woodworth, P. O. Box 846; recording and financial secretary, F. W. Cochrane, P. O. Box 846.

*No. 66, Houston, Tex.—Meets first and third Wednesdays at Labor Hall, corner Preston and Caroline streets. President, J. H. Shipp, 1010 Prairie avenue; recording secretary, J. A. Woolfrom, 1209 Edwards street; financial secretary, Thos. M. Flavin, 2702 Runnels avenue.

*No. 67, Quincy, Ill.—Meets second and fourth Thursday at Trade and Labor Hall, 619 Main street. President, L. S. Hull, 1815 Vermont street; recording secretary, F. G. Ernest, 828 Madison street; financial secretary, J. W. Redmond, 548 South Fourth street.

†No. 68, Denver, Colo.—Meets every Monday at 218 Charles Block, Fifteenth and Curtis streets. President, T. T. Miller, 444 South Tenth street; recording secretary, F. J. Schallert, P. O. Box 614; financial secretary, C. A. Nickerson, P. O. Box 614.

†No. 69, Dallas, Tex.—Meets every Thursday night at Labor Temple, 814 Elm street. President, Geo. W. Reeves, Lion Hotel; recording secretary, J. P. Caughtry, 178 Caleb street; financial secretary, J. P. Conner, Union Depot Hotel.

*No. 70, Cripple Creek, Colo.—Meets every Wednesday at Electrical Workers' Hall, Fairley & Lampman block. President, T. N. Jones, Box 684; recording secretary, Chas. Sallstrom, Box 684; financial secretary, E. P. Steen, Box 684.

†No. 71, Lancaster, Pa.—Meets every Sunday morning at 9:30 in Central Labor Union Hall, South Queen and Mifflin streets. President, James W. Brann, 815 W. Janes street; recording secretary, Wm. R. Bair, 841 E. Walnut street; financial secretary, R. E. L. Tomlin, 472 Fremont street.

*No. 72, Waco, Tex.—Meets second and fourth Saturday nights at Labor Hall, Sixth and Franklin streets. President, J. P. Blystone, 518 Noveltystreet; recording secretary, F. B. Womack, 805 Franklin street; financial secretary, J. E. Caple, 411 Washington street.

*No. 73, Spokane, Wash.—Meets every Monday Central Labor Hall, First and Post streets. President, W. A. Davis, South Post, between Third and Fourth streets; recording secretary, M. McCain,

1508 Mallon avenue; financial secretary, D. W. Eberlin, 2514 E. Sixth street.

*No. 74, Winona, Minn.—Meets first and third Thursdays at Superintendent of Fire Alarms Building, Layfayette street, between Third and Fourth streets. President, George Morrison, 174 East Fifth street; recording secretary, John P. Fromm, 467 East Fourth street; financial secretary, H. B. Kline, 510 Olmstead street.

†No. 75, Grand Rapids, Mich.—Meets Second and fourth Tuesdays at C. L. U. Hall, No. 234 Canal street. President, A. E. Clark, 125 Gold street; recording secretary, F. J. Dickerson, 24 School street; financial secretary, J. Maskel, 98 James street.

*No. 76, Tacoma, Wash.—Meets first and third Saturdays in Mason Block, 18th and A streets. President, L. T. Runk, 1210 S. Yakima avenue; recording secretary, W. A. Treusdale, 3701 South M street; financial secretary, C. A. Young, 410 S. Yakima avenue.

†No. 77, Seattle, Wash.—Meets every Wednesday at Masonic Building, Second avenue and Pike streets. President, James M. Bateman, 6305 Latona avenue Green Lake; financial secretary, L. J. Thaler, 2002 Boren avenue; recording secretary, A. Gordon, 2724 Madison street.

*No. 78, Chicago, Ill.—Meets first and third Fridays at I. B. E. W. Hall, 196 East Washington street. President, H. J. Bayard, 722 East Forty-second street; recording secretary, Pat McDonnell, 119 West Van Buren street; financial secretary, G. H. Foltz, 975 Clifton Park avenue.

†No. 79, Syracuse, N. Y.—Meets first and third Mondays at Myers' Hall, corner of East Genesee and Montgomery streets. President, Edward Gyatt, 305 McBride street; recording secretary, Cornelius O'Connor, 503 Hawley avenue; financial secretary, V. S. Whitney, 238 West Onondaga street.

*No. 80, Norfolk, Va.—Meets every Tuesday at Electrical Worker's Hall, 268 Main street. President, F. R. Pitt, P. O. Box 232; recording secretary, F. W. Walker, P. O. Box 232; financial secretary, Edwin E. Mathews, P. O. Box 232.

*No. 81, Scranton, Pa.—Meets second and fourth Monday at 230 Lackawana avenue. President, D. Laverty, 313 Mulberry street; recording secretary, Wm. W. Luce, 208 S. Hyde Park; financial secretary, T. B. Sturdevant, 905 Cedar avenue.

*No. 82, Henderson, Ky.—Meets first and third Tuesdays in each month in Powers' Hall, First street. President, A. F. Braum, 327 Second street; recording secretary, H. B. Jones, 219 Green street; financial secretary, A. J. Quinn, 318 N. Elm street.

*No. 83, Milwaukee, Wis.—Meets every Friday at Lipp's Hall, corner Third and Prairie streets. President, Wm. Brazell, 381 Cass street; recording secretary, George S. Baird, 704 Broadway; financial secretary, Nick Daleiden, 846 Thirty-third street.

*No. 84, Atlanta, Ga.—Meets every Tuesday in Webb Pressmen's Hall, 23½ South Broad street. President, C. J. Stroud, 25 Buena Vista street; recording secretary, J. H. Carlile, 171 Haynes street; financial secretary, A. R. Rogers, 421 Central avenue.

*No. 85, Sault Ste. Marie, Ontario, Can.—Meets every second and fourth Thursday at Turner Block, Queen and Brock streets, Northwest. President, R. C. Duffin, Sault Ste. Marie, Ont.; recording secretary, H. Lamberton, Sault Ste. Marie, West P. O.; financial secretary, R. B. Johnston, P. O. Box 470, Sault Ste. Marie, Ont.

*No. 86, Rochester, N. Y.—Meets every Monday at Electrical Workers' Hall, 86 State street. President, W. V. Johnson, 49 Hudson street; recording secretary, H. E. Erhardt, 15 Lamberton Block; financial secretary, C. Warder, 238 Tremont street.

*No. 87, Newark, N. J.—Meets every Friday at Electrical Workers' Hall, 236 Washington street. President, Thos. Dunn, 81 Ferry street; recording secretary, Jas. Curran, 76 W. Jersey street, Elizabeth, N. J.; financial secretary, W. McDonald, 332 Bank street.

*No. 88, Savannah, Ga.—Meets every Monday at Odd Fellows Hall, corner Whitaker and President streets. President, M. L. Walton, 218 Liberty, W.; recording secretary, F. Cappelmann,

907 Jefferson street; financial secretary, T. J. Brickman, 40 Drayton street.

*No. 89, Akron, Ohio.—Meets every other Friday at 89 Viaduct. President, G. M. Swarts; recording secretary, F. F. Loomis; F. F. Loomis, 111 Viaduct.

†No. 90, New Haven, Conn.—Meets every Saturday evening at Forester's Hall, 781 Chapel street. President, Sam'l Johnson, care Postal Tel. Cable Co.; recording secretary, John White, 33 First ave., West Haven; financial secretary, Frank Tanner, 156 Congress avenue.

*No. 91, Easton, Pa.—Meets second and fourth Friday nights at Easton Journal Building, Church street between Stigreaves and North Third streets. President, George Strouse, Summit avenue, Phillipsburg N. J.; recording secretary, T. A. Martin, 308 Wilkesbarre street; financial secretary, W. C. Pearce, 40 Wilkesbarre street.

*No. 92, Hornellsville, N. Y.—Meets second and fourth Saturdays at 8 P. M., B. of P. T. Hall, Arcade Building, Broad street. President, C. M. Kelly, 33 Broad street; recording secretary, Max Lundregen, 33 Broad street; financial secretary, H. S. Brown, Krillie Tel. Co.

*No. 93, East Liverpool, O.—Meets second and fourth Tuesday of each month at Red Men's Hall, West Market street. President, R. C. Baxter, 178 Monroe street; recording secretary, Daniel Dickson, 255 Fifth street; financial secretary, J. R. Williams, 260 Fifth streets.

*No. 94, Kewanee, Ill.—Meets second and fourth Saturday nights each month at Federation Hall, 218 N. Tremont street. President, James Tye, Kewanee, Ill.; recording secretary, William H. Finley, 404 Rice street; financial secretary, Frank A. Hyde, 428 S. Tremont street.

*No. 95, Joplin, Mo.—Meets every Thursday night at Labor Hall, Sixth and Wall streets. President, L. L. Haggard, 508 Amanda avenue; financial secretary, Chas. Nelson, Box 461.

*No. 96, Worcester, Mass.—Meets every Monday at Piper Block, Room 19, 419 Main street. President, L. D. Bull, Room 19, 419 Main street; recording secretary, W. D. Kendall, 21 Benefit street; financial secretary, S. A. Strout, 419 Main street.

*No. 97, Mt. Vernon, O.—Meets every first and third Saturday night, at Quindaro, I. O. O. F., Hall, South Main street. President, J. C. Jacobs, 108 Coshocton avenue; recording secretary, E. W. Breece, 215 East Harnhawk street; financial secretary, C. R. Appleton, 104 South Catherine street.

†No. 98, Philadelphia, Pa.—Meets every Tuesday night at Elks' Hall, 232 N. Ninth street. President, Jas. S. Mead, 118 Noble street; Philadelphia, Pa.; recording secretary, Louis S. Fowler, 27 North Larson street, Philadelphia, Pa.; financial secretary, W. A. J. Guscott, 1321 Arch street, business agent's office, Philadelphia, Pa.

*No. 99, Providence, R. I.—Meets every Monday night at Hanley Hall, 63 Washington street. President, A. W. Seavey, No. 1 Falcon street; recording secretary, R. A. Ripley, 1 North Court street; financial secretary, Chas. F. Smith, 38 East street.

No. 100, Jacksonville, Fla.—Meets Tuesdays at Te "s Hall, Bay street, corner Ocean. President, C. H. Bradford, 702 W. Adams; recording secretary, W. B. Morehead, 422 W. Churchstreet; financial secretary, S. B. Kitchen, 722 W. Monroe street.

†No. 101, Middletown, N. Y.—Meets first and third Thursday night at 8 p. m. at Middletown, N. Y., King and Center street. President, Frank J. Schaefer, 30 Cottage street; recording secretary, J. V. Callaghan, 37 Beattie avenue; financial secretary, C. J. Cunningham, 6 Knapp avenue.

†No. 102, Paterson, N. J.—Meets every Thursday evening at Helvetia Hall, 56 Van Houten street. President, Frank H. Hopper, 50 Haledon avenue; recording secretary, E. J. Clancy, Helvetia Hall; financial secretary, C. A. Hill, 20 Manchester avenue.

†No. 103, Boston, Mass.—Meets every Wednesday at Dexter Hall, 987 Washington street. President, John F. Costello, 108 I street, South Boston; recording secretary, W. H. Sullivan, et al.

†No. 104, Boston, Mass.—Meets every Tuesday at Appleton Hall, 9 Appleton street. President, Michael Birmingham, 37 Brockett street, Brighton, Mass.; recording secretary, John A. McInnis, 23 Oak Grove Terrace, Roxbury, Mass.; financial secretary, Leod MacLeod, 107 Main street, Winchester, Mass.

*No. 105, Hamilton, Ont.—Meets second and fourth Thursday at Trades and Labor Hall, 17 Main street, East. President, C. Fry, 114 North Ferguson avenue; recording secretary, Wm. Wilson, 211 Wentworth street; financial secretary, Jas. Donaldson, 109 Maria street.

*No. 106, Jamestown, N. Y.—Meets Monday evening at Warner Block, Room 9, second floor. President, W. J. Bell, Hotel Ellicot; recording secretary, George H. Leburg, 802 East Second street; financial secretary, Wm. J. Torrey, 44 Park street, Jamestown, N. Y.

*No. 107, Pittsburg, Kans.—Meets every Tuesday at Schrifelbene Hall, Sixth and Broadway. President, Scott McCollum; financial secretary, George E. Dickerson, Home Telephone Co.

*No. 108, Tampa, Fla.—Meets every Monday night at Kraus Hall, 619½ Franklin street. President, George A. Bartholomew, 108 Cass street; recording secretary, Jas. T. Maxon, 105 Lafayette street; financial secretary, John F. Vaughan, W. Twelfth ave. and E street.

*No. 109, Davenport, Iowa.—Meets first and third Tuesdays at Labrman's hall, Second and Ripley streets. President, W. A. Thomas, 1112 Ripley street; recording secretary, Ed. Love, 113½ West Second street; financial secretary, Jas. Dallmer, 202 East Fifth street.

*No. 110, Sandusky, Ohio.—Meets first and third Fridays at Fusch's Hall, corner of Monroe and Fulton streets. President, C. McNeal, Jefferson street; recording secretary, Wm. Windisch, 506 Pearl street; financial secretary, Chas. Littleton, 321 Scott street.

*No. 111, Honolulu, Hawaii.—Meets first and third Thursdays at 7:30 p. m., Brooklyn Hall, Alaken between Queen and Merchant streets. President, Carl M. Taylor, Box 661; recording secretary, John Trueman, Hawaiian Electric Co.; financial secretary, A. R. G. McCormick, 1124 Adams Lane.

*No. 112, Louisville, Ky.—Meets every Tuesday night at Germania Hall, 107 W. Jefferson street. President, Joe E. Bryant, 1624 Wilson; recording secretary, H. W. Rowlett, R. F. D. 2; financial secretary, F. H. Weaver, 739 Washington street.

†No. 113, Colorado Springs, Colo.—Meets every Friday at A. O. H. Hall, over Voorhees' store, 22 South Tejon street. President, Frank Graham, 103 Summitt street; recording and financial secretary, Wm. E. Waldron, Box 746, Colorado City, Col.

†No. 114, Toronto, Can.—Meets first and third Wednesdays at Temple Building, corner Bay and Richmond streets. President, W. J. Middleton, F. Shaftsbury avenue; recording secretary, W. 18 Partiello, 21 Louisa street; financial secretary, G. C. Beckett, 61 Duke street.

*No. 115, Austin, Tex.—Meets second and fourth Wednesdays at Trades Council Hall, over 1000 Cong. avenue. President, P. G. Johnson, 202 W. 8th street; recording secretary, G. T. Dunaway, 202 W. 8th street; financial secretary, Bailey Beard, 202 W. 8th street.

†No. 116, Los Angeles, Cal.—Meets every Tuesday at Brents Hall, 547 South Spring street. President, E. Sterns, 1124 West Twenty-first street; recording secretary, W. H. Williams, 524 B Torme street; financial secretary, H. M. Scott, 547 Fickett street.

*No. 117, Elgin, Ill.—Meets first and third Thursday, at Trades Council Hall, 102 Douglas avenue. President, I. C. Burney, 316 North Crystal street; recording secretary, T. H. Bryson, 226 Wellington avenue; financial secretary, T. C. Wetmore, 411 Du Page street.

*No. 118, Dayton, O.—Meets Thursday nights at Deister Post Hall, 25 North Main street. President, C. M. Rike, 128 East Fourth street; recording secretary, Geo. Settell, 20½ W. Fifth street; financial secretary, J. W. Holt, 2 E. Stanley street.

***No. 119, Far Rockaway, L. I.**—Financial secretary, A. E. Funnell, 21 Shepherd avenue, Brooklyn, N. Y.

***No. 120, London, Ont.**—Meets third Tuesday in each month at Oriental Hall, Clarence street. President, G. Upshall, 569 William street; recording secretary, L. R. Folley, 189 Wellington street; financial secretary, James G. Rushton, 12 Napier street.

†No. 121, Denver, Col.—Meets every Wednesday at Charles Bldg., room 202, Fifteenth and Curtis streets. President, E. P. Kernahan, 1800 West Colfax; recording secretary, E. V. Wilson, 707 Fourteenth street; financial secretary, R. C. Easton, 2303 Washington avenue.

***No. 122, Great Falls, Mont.**—Meets every Thursday, at Laundry Workers Hall, Sixteenth and Second streets north. President, Wm. P. Benson, Box 385; recording secretary, Silas Smith, Box 385; financial secretary, E. W. Frost, Box 385.

***No. 123, Wilmington, N. C.**—Meets every Wednesday night at National Bank Building, Front and Princess streets. President, J. Womack, Wilmington, N. C.; recording secretary, E. C. Yarbrough, Wilmington; financial secretary, E. E. Vickers, 313 North Front street.

***No. 124, Galveston, Tex.**—Meets second and fourth Fridays at Cooks' and Waiters' Hall, 807½ Tremont street. President, Jos. Cohen, 18 Post Office street; recording secretary, Ed. F. Parks, Atlanta Hotel; financial secretary, Louis Tschumy, 1805 Post Office street.

***No. 125, Portland, Ore.**—Meets every Wednesday at No. 234½ Morrison street. President, W. B. Morris, 68 Seventh street; recording secretary, C. F. Canfield, 76 W. Park street; financial secretary, Thos. Synott, 168 Fourth street.

***No. 126, Little Rock, Ark.**—Meets first and third Tuesday, at Labor Temple, Markham and Main streets. President, A. D. McConnell, 117 West Fourth street; recording secretary, E. T. Reynolds, 1422 Battery street; financial secretary, T. M. Kelly, 2003 Scott street.

†No. 127, New Rochelle, N. Y.—Meets second and last Friday in each month at 18 Lawton street. President, R. K. Johnson, 18 Lawton street, New Rochelle, N. Y.; recording secretary, E. P. Byrnes, Larchmont, N. Y.; financial secretary, H. B. Miller, 47 Gulon Place, New Rochelle, N. Y.

***No. 128, Alton, Ill.**—Meets every first and third Wednesday at Squire Nathan's office, Second and Market streets. President, A. Foster, 511 Market street; recording secretary, Joe Z. White, 618 Belle street; financial secretary, Chas. B. Davis, 517 State street.

***No. 129, Nashville, Tenn.**—Meets every Saturday night at Labor Advocate Hall. President, C. Snider, 301 Church street; recording secretary, D. R. Johnson, 301 Church street.

†No. 130, New Orleans, La.—Meets every Thursday at Carpenter's Union hall, 423 St. Charles street. President, Wm. Fisher, 615 Third street; recording secretary, E. G. Cunningham, 1718 La. avenue; financial secretary, A. Warner, 1025 Gen. Taylor street.

†No. 131, Traverse City, Mich.—Meets second and fourth Tuesdays in month in Central Labor Hall, corner Union and State streets. President, I. L. Cook, Traverse City, Mich.; recording secretary, H. E. Maillet, City Tel. Co., Traverse City, Mich.; financial secretary, Frank Alvord, 314 S. Division street, Traverse City, Mich.

†No. 132, South Bend, Ind.—Meets every two weeks on Monday evenings at Central Labor Hall, South Michigan street. President, J. E. Perry, 318 South Michigan street; recording secretary, C. C. Miller, Home Tel. Co.; financial secretary, N. J. Shoemaker, P. O. Box 803.

†No. 133, Detroit, Mich.—Meets every Wednesday night at Johnston's Hall, 34 Monroe avenue. President, L. A. Berg, 164 Locust street; recording secretary, S. C. Wilson, 122 W. Milwaukee avenue; financial secretary, W. F. Tewsbury, 274 Porter street.

†No. 134, Chicago, Ill.—Meets every Thursday night at 196 East Washington street. President, Chas. L. White, 931 Monticello avenue; recording secretary, George O. Johnson, 1250 West Van Buren street; financial secretary, J. B. Wilson, 196 Wabington street; business agent John H. Maloney, 196 Washington street.

***No. 135, La Crosse, Wis.**—Meets every second and fourth Fridays of each month at Malin Hall, South Fourth street. President, M. Pendergast, 706 State street; recording secretary, Charles A. Dittman, 315 North Tenth street; financial secretary, Charles H. Yates, 532 North Eighth street.

***No. 136, Birmingham, Ala.**—Meets every Friday at Paperhangers' Hall, 292½ First avenue. President, J. C. B. Vincent; recording secretary, T. O. James; financial secretary, F. S. Williamson, 600 John street.

†No. 137, Albany, N. Y.—Meets second and last Tuesdays of month at Hudson avenue and Broadway. President, Benj. B. Smith, 319 Clinton avenue; recording secretary, Jas. H. Crook, 178 Livingston avenue; financial secretary, J. A. Ryan, 25 Catherine street.

***No. 138, Fort Wayne, Ind.**—Meets first and third Thursdays, at Carpenter's Hall, corner Clinton and Berry streets. President, Thos. Fleming, 204 N. Barr street; recording secretary, B. C. Hattie, 28 Bank Block; financial secretary, D. Mullen, 200 N. Barr street.

***No. 139, Elmira, N. Y.**—Meets second and fourth Sundays at Federation of Labor Hall, 372 Carroll street. President, H. D. Pitcher, 417 East Market street; recording secretary, J. C. Marvin, 609 East Church street; financial secretary, J. K. Packard, 372 West Fifth street.

***No. 140, Schenectady, N. Y.**—Meets first and third Wednesdays at Carpenter's Hall, State street. President, G. W. Colony, No. 8 Washington avenue; recording secretary, Guy S. Neudamaker, No. 8 Front street; financial secretary, Bert S. Reid, 612 Smith street.

†No. 141, Wheeling, W. Va.—Meets every Wednesday at Peabody Building, Room 207, Market street, between Eleventh and Twelfth streets. President, William Bumgarner, 55 Twelfth street; recording secretary, Eugene Hagan, 730 Market street; financial secretary, Earle C. Beall, 167 Fourteenth street.

†No. 142, Wheeling, W. Va.—Meets every Monday night at 7:30, Electrical Workers' Hall, Peabody Building, Room 207, Market street. President, Ed. Johnson, 1024 Chapline street; recording secretary, Geo. Wey, 180 Fifteenth street; financial secretary, W. A. Kent, 107 Ohio street.

***No. 143, Ashtabula, O.**—Meets second and fourth Mondays, at C. L. U. Hall, Newbury Block, corner Main and Center streets. President, S. D. Eckler, 16 Tyler avenue; recording secretary, C. A. Amy, 17 Sycamore street; financial secretary, O. Meyers, 5 Taylor avenue

***No. 144, Wichita, Kan.**—Meets every Thursday night at Red Men's Hall, 400 East Douglas. President, S. C. Pratt, 710 S. Market street; recording secretary, Louis McVay, Ind. Tel. Co.; financial secretary, B. L. Cushman, 690 S. Emporia street.

***No. 145, Saginaw, Mich.**—Meets Wednesday night at Engineer's Hall, 218 Genesee avenue. President, Peter Derome, 710 Holden street; recording secretary, Charles Hillman, 1502 Janes avenue; financial secretary, Ross Blankert's 2807 South Washington street.

***No. 146, Bridgeport, Conn.**—Meets Wednesday night at 1106 Main street. President, J. T. Rooney, 16 Housatonic avenue; recording secretary, J. W. Peck, 445 Poplar street; financial secretary, F. J. Quinlan, P. O. Box 635.

***No. 147, Anderson, Ind.**—Meets every Friday night at Bricklayer's Hall, 909 Main street. President, Jos. T. Griffin, 1022 Main street; recording secretary, Edgar Lindsay, Harter House; financial secretary, C. H. Farrell, 1022 Main street.

†No. 148, Washington, D. C.—Meets Saturday night at Royal Hall, corner Seventh and N streets northwest. President, O. E. Lewis, 807 Eighth street northwest; recording secretary, I. H. Ware, 1345 Pennsylvania avenue northwest; financial secretary, M. V. Murphy, 808 Fifth street northeast.

***No. 149, Aurora, Ill.**—Meets second and fourth Tuesdays at Trade's Assembly Hall, on Island. President, C. W. McCray, 15 S. West street; recording secretary, E. A. Wood, 218 Benton street; financial secretary, Ed. Millhouse, 23 North Broadway.

*No. 150, Bay City, Mich.—Meets second and fourth Tuesdays at A. O. U. W. Hall, corner Center and Adams streets. President, Geo. Affleck, 289 North Sherman street; recording secretary, W. D. Parker, Essexville, Bay County, Mich.; financial secretary, Charles Crampton, City Hall, Bay City, Mich.

*No. 151, San Francisco, Cal.—Meets every Tuesday at Machinist's Hall, 1056 Mission near Eighth street. Headquarters, 921 Market street. President, H. L. Worthington, 15 Walter street; recording secretary, J. F. Leonard, 1227 Filbert street; financial secretary, James C. Kelly, 50 Webster street.

*No. 152, Ft. Scott, Kan.—Meets first and third Thursdays at Painters' Hall, 201 Market street. President, J. D. Runkle, 520 N. National avenue; recording secretary, J. E. White, 529 N. National avenue; financial secretary, S. P. Armstrong, 110 N. Judson street.

*No. 153, Marion, Ind.—Meets every Tuesday night at Riley Hall, northwest corner Third and Washington streets. President, E. M. Robb, Sixth and Adams street; recording secretary, W. B. Gleason, care of Homestead Hotel; financial secretary, H. C. La Follette, 1416 West Fourth street.

*No. 154, Rock Island, Ill.—Meets every Thursday night at Electrical Workers' Hall, S. E. corner 17th street and 3d ave. President, Chas. Norton, 221 Twentieth street; recording secretary, Harry Jeys, 2815½ Five-and-a-Half ave.; financial secretary, H. W. Dean, 1018 1½ street.

*No. 155, Oklahoma City, O. T.—Meets every Wednesday night at Flood Building, Reno and Broadway. President, John Swirzinski, 107 East Reno; recording secretary, C. F. Blocher, 115 South Harvey; financial secretary, J. C. Clark, 1020 West First street.

*No. 156, Ft. Worth, Tex.—Meets every Wednesday night at B. T. C. Hall, 210 Main street, third floor, Powell Building. President, H. H. Lawry, care Citizens Light and Power Co.; recording secretary, Lee Stephens, 602 West First street; financial secretary, W. P. Anderson, 201 East Third street.

*No. 157, Elkhart, Ind.—Meets third Thursday of every month, Central Labor Hall, corner Main and Franklin streets. President, L. D. Whittig, Prairie street, Elkhart, Ind.; recording secretary, H. A. Row, 506 Beardsley avenue; financial secretary, Asa Kintzler, R. F. D. No. 1.

*No. 158, Temple, Tex.—Meets second and fourth Wednesdays at Odd Fellows' Hall, Post Office Building. President, T. J. Hewitt, Box 882; recording secretary, W. W. Clay, 215 North Fifth; financial secretary, H. S. Newland, 506 South Eleventh street.

*No. 159, Madison, Wis.—Meets second Thursday at Union Hall, State street. President, Wm. Neff, 1816 Dayton street; recording secretary, H. W. Schroeder, 788 Williams street; financial secretary, H. Nelson, 348 W. Doty street.

*No. 160, Zanesville, O.—Meets first and third Tuesdays at 7:30 p. m., at Building Trades Hall, over 208 Main street. President, F. J. Poyner, 5 Bell Flats; recording secretary, John Mangin, Kirk House; financial secretary, A. E. DeLong, Route 8, Zanesville.

*No. 161, Uniontown, Pa.—Meets first and third Tuesdays, room 307, First National Bank Bldg., corner Pittsburgh and Main street. President, W. J. Dickson; recording secretary, J. F. Monon, 9 Commercial Block; financial secretary, H. T. Shockley.

*No. 162, Omaha, Neb.—Meets every Thursday evening, at Labor Temple, Fifteenth and Dodge streets. President, Fred Johnson, Labor Temple; recording secretary, Geo. Corrin, Labor Temple; financial secretary, J. B. Piacle, Labor Temple.

*No. 163, Wilkesbarre, Pa.—Meets second and fourth Mondays at Building Trades Council Hall, 81 West Market street. President, J. J. McGlynn, 890 E. South street; recording secretary, Thomas Moore, 86 North Sherman street; financial secretary, D. H. Ebert, 400 Scott street.

*No. 164, Jersey City, N. J.—Meets Monday, Fehren's Hall, 168 Beacon avenue. President, J. A. Brennan; recording secretary, Otto Bauer, 187 Griffith street; financial secretary, Edward

F. Kenna, 1119 Washington street, Hoboken N. J.

*No. 165, Newport News, Va.—Meets every other Tuesday evening at C. L. U. Hall, corner Thirty-second street and Washington avenue. President, J. W. Driver, 1015 Twenty-sixth street; recording secretary, E. C. Kelly, R. F. D. No. 1, Hampton, Va.; financial secretary, R. A. Gentis, 1030 Twenty-eighth st.

*No. 166, Winnipeg, Manitoba, Can.—Meets second and fourth Thursdays at Trades Hall, corner Market and Main. President, C. H. Wilks, 708 McDermott avenue; recording secretary, J. S. Milen, 647 Elgin avenue; financial secretary, C. W. Francis, 493 Alexandria avenue, Second Floor.

*No. 167, Pittsfield, Mass.—Meets first and third Wednesdays at England's Block, North street. President, Hugh J. Breslin 242 Linden street; recording secretary, Wm. DeForrest, 8 Cherry street; financial secretary, Frank H. Smith, 27 Wellington avenue.

*No. 168, Parkersburg, W. Va.—Meets Wednesdays at Bricklayers' Hall, Court Square. President, W. F. Ramsey, 42 Twelfth street; recording secretary, J. Roy Mayhew, 178 Avery street; financial secretary, W. C. Vaughan, 1017 Lynn street.

*No. 169, Fresno, Cal.—Meets second and fourth Mondays at Edgerly's Hall, corner I and Tuare streets. President, Henry Stewart, 129 Diana street, Fresno; recording secretary, B. M. Collins, 1835 F street, Fresno; financial secretary, Clarke Steger, Box 64, Fresno.

*No. 170, Mason City, Iowa.—Meets first and third Thursday evenings at Howe's Hall cor. Fourth and Main streets. President, A. H. Ramsey, 216 South Washington street; recording secretary, F. W. Roberts, 214 East Tenth street; financial secretary, J. D. Templin, 771 East State street.

*No. 171, Ann Arbor, Mich.—Meets first and third Saturdays at Trades Council Hall, South Main street. President, George Haggirt, 18 River st., Ypsilanti; recording secretary, Mervin Green, Ypsilanti; financial secretary, T. C. Phelps, 114 Felch street.

*No. 172, Newark, Ohio.—Meets every Friday night at I. B. E. W. Hall, 11½ E. Church street. President, Scott Varnie, 286 Beech street; recording secretary, Sam. C. Alledorf, 81 Ninth street; financial secretary, V. H. Effinger, 56 N. Morris street.

*No. 173, Ottumwa, Iowa.—Meets first and third Saturday at Labor Hall, East Second street. President, K. C. Carruthers, South Ottumwa; recording secretary, S. W. Speer, 503 Myrtle street; financial secretary, H. E. McKown, 204 North McLean street.

*No. 174, St. Johns, N. B.—Meets first and third Wednesdays at Berryman's Hall, corner Prince and Charlotte streets. President, D. H. Melvin, 37 High street; recording secretary, Jas. Laisay, 10 Ashmond Place, financial secretary, Oltrs H. Tracy, 88 Cliff street.

*No. 175, Benton Harbor, Mich.—Meets every Wednesday, Robinson Block, 110 Pipestone street. President, C. C. Maddux, Benton Harbor; recording secretary, R. G. Moats, Benton Harbor; financial secretary, R. G. Moats, 126 Summit street.

*No. 176, Joliet, Ill.—Meets every Wednesday at Labor Hall, Jefferson and Ottawa street. President, J. W. Gates, 206 South Ottawa street; recording secretary, J. W. Welch, 304 Western avenue; financial secretary, W. D. Mullinx, 218 Beach street.

*No. 177, Paducah, Ky.—Meets Second and fourth Mondays at Central Labor Hall, corner of Seventh and Court streets. President, J. Hanback, 427 Clark street; recording secretary, J. T. Johnson, 427 Clark street; financial secretary, H. C. Rawling, 427 Clark street.

*No. 178, Canton, Ohio.—Meets first and third Wednesday at Brown's Hall, West Tusc street. President, J. H. Arnold, 1025 Obey avenue; recording secretary, D. A. Merritt, 1025 Obey avenue; financial secretary, H. T. Seymour, 1181 West Third street.

*No. 179, Charleston S. C.—Meets every Friday night at Knights of Pythias Hall, King street

opposite Marion Square. President, I. R. Ward; recording secretary, Jas. Laresey, 10 Ashmead Place; financial secretary, Samuel Webb.

*No. 180, **Vallejo, Cal.**—Meets first and third Friday at Labor Council Hall, Sacramento street. President, C. A. Pracht, 317 Kentucky street; financial and recording secretary, P. L. Schoof, corner of Main and Santa Clara streets.

†No. 181, **Utica, N. Y.**—Meets third Tuesday at Labor Temple, Hotel street, Utica, New York. President, John Greenwood, 82 Roberts street; recording secretary, Herman Wameling, 247 Seymour avenue; financial secretary, Edward T. Fox, 199 Court street.

*No. 182, **Montreal, Can.**—Meets every first and third Wednesday at St. Joseph's Hall, St. Elizabeth street. President, Thomas Soucy, 168 Wolfe street; recording secretary, J. D. Lanthier, 517 Mount Royal street; financial secretary, John Chevalier, 8 Neville Place.

*No. 183, **Lexington, Ky.**—Meets second and fourth Tuesdays at Van Deven Hall, Main street, east of Broadway. President, M. M. Welch, 182 Walnut street; recording secretary, Leslie Kitchen, corner Cross and Pine streets; financial secretary, J. R. Whitmer, P. O. Box 577, Lexington, Ky.

*No. 184, **Galesburg, Ill.**—Meets first and third Wednesdays of every month at Trades Assembly Hall, corner Main and Boone avenue. President, J. H. Shulz, 268 Duffield avenue; recording secretary, Roy Squires; financial secretary, John Norwood, 149 E. Brooks street.

*No. 185, **Helena, Mont.**—Meets first and third Saturdays at Rooms 26, 27, 28 Atlas Block, No. 7 Main street. President, Frank Avery, P. O. Box 1227; recording secretary, Alex. Jones, P. O. Box 1227; financial secretary, C. H. Coar, P. O. Box 1227.

†No. 186, **Hartford, Conn.**—Meets every Tuesday at Stationary Engineers' Hall, Times Bldg. President, J. Owens, 88 Hawthorne street; recording secretary, E. O. Sperry, 55 Grand street, New Britain; financial secretary, E. O. Sperry, 86 Kensington street, New Britain, Conn.

*No. 187, **Oshkosh, Wis.**—Meets every Tuesday night at Stationary Engineers' Hall, cor. State and Otter streets. President, Emil Prong, 16 Carr street; recording secretary, J. R. Mentzell, Ceape street; financial secretary, P. S. Rixby, 140 Pearl street.

†No. 188, **Dallas, Tex.**—Meets every Wednesday at Labor Hall, Elmwood Scotland Court. President, E. A. White, 132 N. Akard; recording secretary, B. E. Loper, 269 Cochran street; financial secretary, L. A. Burrs, 116 Martin street.

†No. 189, **St. Louis, Mo.**—Meets every Friday night at Lightstone's Hall, Eleventh and Franklin avenue. President, Chas. R. Reitz, 4524 St. Ferdinand street; recording secretary, Robert Giannon, 1028 Franklin avenue; financial secretary, John G. Rowles, 4947 College avenue.

*No. 190, **Newark, N. J.**—Meets second and fourth Mondays at Shawgers Hall, corner Roseville avenue and Orange street. President, Morris R. Welch, 113 Dickerson street; recording secretary, Joseph Heines, 181 North Second street; financial secretary, Joseph R. Hoch, 820 New street.

*No. 191, **Everett, Wash.**—Meets every Thursday night at Labor Temple, 2820 Lombard street. President, M. Blair, 8115 Wetmore avenue; recording secretary, Edward F. Burkhart, 2727 Wetmore avenue; financial secretary, L. V. Harper, P. O. Box 228.

*No. 192, **Memphis, Tenn.**—Meets every Tuesday at Union Labor Temple, Second street. President, D. Smith, 111 Monroe street; recording secretary, Geo. A. Hulbert, 186 Union street; financial secretary, W. G. Nutzell, 810 Second street.

†No. 193, **Springfield, Ill.**—Meets every Tuesday at I. B. E. W. Hall, 210½ S. Fifth street. President, Wm. Chiles, 1216 E. Jackson street; recording secretary, John Mansfield, 1007 E. Cook street; financial secretary, L. B. Johnson, 528 N. Fifth street.

*No. 194, **Shreveport, La.**—Meets every Tuesday night at Labor Hall, corner of Texas and Common streets. President, F. M. Stevens, 640 Texas street; recording secretary, R. L. Curtis,

828 Walnut street; financial secretary, S. E. Blodget, Arcade Hotel.

*No. 195, **Marietta, O.**—Meets every Thursday at Trades Labor Hall, corner Second and Tyner-way streets. President, A. T. Willey, Marietta Tel. Company; recording secretary, Wm. H. Reed, 21½ Fifth street; financial secretary, E. Davis, Box No. 584.

*No. 196, **Rockford, Ill.**—Meets first and third Fridays at Electrical Workers Hall, 80½ West State street. President, S. M. Griffith, 518 Grove street; recording secretary, L. Harbaugh, 526 East street; financial secretary, L. C. Williamson, 528 W. State street.

*No. 197, **Bloomington, Ill.**—Meets every Friday at Electrical Workers' Hall, over 106 West Front street. President, J. J. Eversole, P. O. Box 274; recording secretary, C. J. Winters, P. O. Box 274; financial secretary, W. S. Briscoe, Box 286.

*No. 198, **Dubuque, Iowa.**—Meets second and fourth Wednesdays at Cascade Building, Room 1. President, G. D. Johnson, corner Fourteenth and Clay streets; recording secretary, John Blessing, corner Sixth and Main; financial secretary, J. N. Krahil, Lock Box 103.

*No. 199, **St. Louis, Mo.**—Meets first and third Tuesdays at Electrical Workers' Hall, No. 1028 Franklin avenue. President, W. J. Kelley, 2914 Madison street; recording secretary, C. F. Hinds, 813 N. Grand avenue; financial secretary, E. N. Glenny, 5827 Theodosia avenue.

*No. 200, **Anaconda, Mont.**—Meets first and third Tuesdays, Mattie Block, East Commercial avenue. President, W. R. Wright, P. O. Box 483; recording secretary, Jas. O'Mara, P. O. Box 483; financial secretary H. J. Hamilton, P. O. Box 526.

†No. 201, **Appleton, Wis.**—Meets first and third Tuesday of each month at Master Builders' Hall, corner Edward and Appleton streets. President, M. G. Smith, 485 Winnebago street; recording secretary, C. H. Mackey, 667 Appleton street; financial secretary, N. J. Deuster, 665 Appleton street.

*No. 202, **Seattle, Wash.**—Meets second Tuesday of each month in basement of Hotel Seattle, Occidental avenue and Yesler street. President, R. C. Williams, 508 Fifth avenue; recording secretary, Gus Soderberg, Eighth avenue near Pike street; financial secretary, L. H. Bickley, 1212 East Columbia street.

*No. 203, **Champaign and Urbana, Ill.**—Meets first and third Tuesdays of each month, at Percival Hall, corner of Neil street and University avenue. President, Frank Lester, Room No. 46, Lindsley Block, Urbana, Ill.; recording secretary, A. L. Chandler, 406 West Vine street, Champaign; financial secretary, J. R. Sheffer, 509 North Neil street.

†No. 204, **Springfield, Ohio.**—Meets first and third Fridays at Johnson Building, corner W. Main street and Walnut alley. President, Fred C. Rotsel, 112 South Center street; recording secretary, Harry S. Copeland, 198 Linden avenue; financial secretary, Henry F. Shultz, 326 S. Center street.

*No. 205, **Jackson, Mich.**—Meets every Tuesday night at Labor Hall, corner Jackson and Main streets. President, E. Osborn, 511 North Jackson street; recording secretary, Wm. Lawrence, 816 Greenwood avenue; financial secretary, C. M. Griffing, 314 Waterloo avenue.

*No. 206, **Hamilton, Ohio.**—Meets every Thursday night at 8 p. m., in K. O. T. M. Hall, corner Third and Court streets. President, Peter Hovis, financial secretary, H. Ed Herrmann, 28 South B street.

*No. 207, **Stockton, Cal.**—Meets every Tuesday, at Turner Hall, 110 North Hunter street. President, Frank Ellison, 229 South Sutter street; recording secretary, Wm. E. Lee, 639 South American street; financial secretary, James R. Wagner, 603 West Park street.

*No. 208, **Muscatine, Iowa.**—Meets second and fourth Fridays of each month at Trades and Labor Assembly Hall, 106-107 Iowa avenue. President, L. P. Davis, 1607 Mulberry street; recording secretary, C. A. Adams, 417 Chestnut street; financial secretary, W. F. Demorest, 206 East Second street.

*No. 209, **Logansport, Ind.**—Meets every Thurs-

Dec. 1903

day night at Painters' Hall, 238½ Market street. President, A. W. Tam, 107 Sycamore street; recording secretary, N. Costenborder, 820 Race street; financial secretary, W. E. Dill, 1127 Broadway.

† No. 210, Atlantic City, N. J.—Meets every Wednesday night at Odd Fellows Hall, S. New York avenue. President, Geo. H. Orr, 135 Mt. Vernon ave.; recording secretary, I. N. Cramer, rear 12 South Ohio ave.; financial secretary, Jas. Dorman, 1915 Caspian ave.

† No. 211, Atlantic City, N. J.—Meets every Friday night in Memorial Hall, New York avenue. President, W. H. Malloch; recording secretary, J. F. Moore; financial secretary, A. J. Riley, 4 Bartlett avenue.

† No. 212, Cincinnati, O.—Meets every Wednesday at Southwest corner Court and Walnut streets. President, John Foote, 8271 Goff avenue; recording secretary, Harry Falquet, 1125 Jackson street; financial secretary, W. B. Kelley, 321 Pike street.

* No. 213, Vancouver, B. C.—Meets second and fourth Thursdays at O'Brien's Hall, corner Hastings and Homer streets. President, J. E. Dubberly, corner Seymour and Davie street; recording secretary, A. B. Godfrey, 1112 Melville street; financial secretary, H. V. Rankin, 128 East Cordova street.

* No. 214, Olean, N. Y.—Meets every Friday at Fountain Hose House, First street. President, S. D. Harding; recording secretary, E. E. Allen, 607 West State street; financial secretary, T. E. Dilling, 128 South Twelfth street.

* No. 215, Hot Springs, Ark.—Meets every Tuesday night at Trade's Council Hall, Chapel street. President, J. T. Smith, P. O. Box 374; recording secretary, A. Manders, General Delivery; financial secretary, D. McDonald, Sixth and Kirk streets.

* No. 216, Owensboro, Ky.—Meets every Thursday at Lineman Hall, 315½ Frederick street. President, A. D. Fayght, City Light Plant; recording secretary, R. L. Woods, 815 Cherry street; financial secretary, E. L. Mitchell, 525 Mason ave.

† No. 217, Seattle Wash.—Meets Mondays at Waitresses Hall, 1420 Second avenue. President, G. W. Johnson, 307 First avenue, West; recording secretary, C. G. Johnson, 116 Fifth avenue, North; financial secretary, W. W. Morgan, 1629 Fourth avenue.

* No. 218, Sharon, Pa.—Meets every second Monday at Leslie Hall, Chestnut street. President, S. Tollman, Sharpsville, Pa.; recording secretary, Chas. Ault, Rankin House, Sharon, Pa.; financial secretary, H. W. Rice, P. O. Box 80, Sharon, Pa.

* No. 219, Sullivan, Ind.—Meets first and third Tuesday night at Electric Plant Building. President, S. M. Riggs; recording secretary, J. E. Stanfield, Sullivan, Ind.; financial secretary, N. S. Worley.

* No. 220, Rochester, N. Y.—Meets first and third Tuesdays at Durand Building, West Main street. President, P. J. Cotter, 98 Ontario street; recording secretary, Frank A. Yatteau, 17 Gregory street; financial secretary, E. A. Thompson, 14, 435 Main street east.

† No. 221, Beaumont, Tex.—Meets every Friday at Rabbs Hall, Pearl street between College and Washington. President, O. M. Clark, Beaumont Tele. Co.; recording secretary, Claud Hildebrand, Beaumont Traction Co.; financial secretary, J. H. Cousins, 371 Cypress street.

* No. 222, Lafayette, Ind.—Meets every Thursday at Brick Masons' Hall, Tenth and Main streets. President, F. E. Williams, 418 N. Fifth street; recording secretary, Homer A. Davis, 410 N. Fourth street; financial secretary, Walter Hawkins, 852 N. Salisbury street, West Side.

* No. 223, Brockton, Mass.—Meets second and Fourth Monday at Red Men's Hall, 47 Center street. President, Harry R. Allen, 46 Fuller street; recording secretary, Everett W. Cole, 416 School street, Whitman, Mass.; financial secretary, Arthur B. Spencer, 228 Crescent street.

* No. 224, Ft. Dodge, Iowa.—Meets second and fourth Tuesdays of each month at Painters Hall, 695½ Central avenue; President, C. J. Hakes; recording secretary, D. W. Lyman; financial secretary, Henry C. Cox, Ft. Dodge, Iowa.

* No. 225, Topeka, Kans.—Meets every Thursday at Building Trades' Hall, 420 Kansas avenue. President, A. Thomas, P. O. Box 14; recording secretary, W. V. Paschal, P. O. Box 14; financial secretary, D. C. Piatt, 502 Chandler street.

† No. 226, Cedar Rapids, Iowa—Meets first and third Tuesday at Dow's Block, Second avenue and Second street. President, W. E. Washburn, Cedar Rapids; recording secretary, Fred. Day, Cedar Rapids; financial secretary, Alex. Sampson, Box 271, Cedar Rapids, Iowa.

† No. 227, Birmingham, Ala.—Meets every Wednesday night at Fox's Hall, corner Fourth avenue and 10th street. President, R. I. Parham, Southern Bell Tel. Co.; recording secretary, M. D. McRae, Southern Bell Tel. Co.; financial secretary, J. G. Pulliam, Southern Bell Tel. Co.

* No. 228, Oil City, Pa.—Meets first and third Tuesdays at K. of P. Hall, Center and Elm streets. President, H. Bocel, 19 Grove avenue; recording secretary, W. A. Humes; financial secretary, J. W. Bullock, 212 East South Second street.

† No. 229, Manchester, N. H.—Meets second and fourth Tuesdays at Building Trades Hall, Elm street. President, E. F. Farrell, 31 Armory street; recording secretary, Wm. E. Michie, City Hotel; financial secretary, W. G. Frazer, 58 Pennacook street.

* No. 230, Victoria, B. C.—Meets every second and fourth Thursday at Labor Hall, corner Johnson and Douglas streets. President, C. C. McKenzie, Douglas street; recording secretary, Frank R. Shapeland, 29 Mearns street; financial secretary, Ed. L. Vaughan, P. O. Box 854.

* No. 231, Grand Rapids, Mich.—Meets second and fourth Friday evenings of each month at Lincoln Club Rooms, Pearl street. President, Stephen D. Foster, 221 Grand avenue; recording secretary, G. E. Miles, 271 Henry street; financial secretary, F. A. Shank, 1 Coit avenue Place.

No. 232, Schenectady, N. Y.—Second and Fourth Tuesdays, at Bradt-Yates Building, corner Center and State streets. President, A. Nuttall, 4 Harvard street; recording secretary, C. H. Tinke, 781 E. Liberty street; financial secretary, E. Burnham, 118 Guilderland avenue.

† No. 233, Colorado Springs, Colo.—Meets every Thursday at Building Labor Hall, over 12 East Huerfano street. President, James L. Smith, 782 East Kiowa street; recording secretary, Robt. J. Clark, 114 North Weber; financial secretary, S. C. Swisher, 425 East Boulder street, P. O. 654.

† No. 234, Schenectady, N. Y.—Meets first Saturday in each month, at Machinists' Hall, cor. Jay and State streets. President, Wm. Armor, 4 Catherine street; recording secretary, L. M. McIntosh, 338 Carrie street; financial secretary, C. A. Sherman, 338 Carrie street.

* No. 235, Cincinnati, Ohio.—Meets Thursday at Joseph's Hall Twelfth and Vine streets. President, Geo. Park; recording secretary, Ray McGregor, 1185 Vine street; financial secretary, Frank Misner, 524 Culvert street.

* No. 236, Streator, Ill.—Meets first and third Monday nights at Casey's Hall, East Main street. President, H. M. Griffith, 805 Glass street; recording secretary, Geo. Duffner; financial secretary, John A. Schuler, 809 East Bridge street.

* No. 237, Lorain, Ohio.—Meets first and third Thursday in each month at I. O. O. F. Hall, Broadway. President, R. Lindsay, No. 8 Wilson Block; recording secretary, E. P. Barnes, 509 W. Erie Avenue; financial secretary, A. C. Marsh, 240 8th street, Elyria, Ohio.

* No. 238, Asheville, N. C.—Meets every Saturday at C. L. U. Hall, 39 Patton avenue. President, E. H. Clenenger, Western Union Telegraph Office; recording secretary, J. H. Graham, 140 Bailey street; financial secretary, J. H. Graham, 140 Bailey street.

No. 239, Newark, N. J.—Electric fixture fitters, wiremen, and hangers—Meets first and third Thursday at Electrical Workers Hall, 236 Washington street. President, Wm. G. Scheussler, 241 Camden street; recording secretary, Harry Schnarr, 185 North Fourth street; financial secretary, Michael Tapenbaum, 104 Hunterdon st.

No. 240, Philadelphia, Pa.—Telephone—Meets every Thursday at Morning Star Hall, northeast corner of Ninth and Callowhill streets. President, H. Demitrowitz, 2568 N. Napa street.

DEC. 1933

recording secretary, J. C. Boone, 2328 Coral street; financial secretary, H. D. Loudenslager, 1004 Green street.

†No. 241, Dayton, Ohio.—Meets every second and fourth Friday night at Deister Post Hall, 25 North Main street. President, H. E. Phillips, Park street; recording secretary, S. H. Kitchen, 86 S. Williams street; financial secretary, C. Reiter, 911 West Third street.

*No. 242, Decatur, Ill.—Meets every Friday night at Room 416, Powers' Building, cor. South Water and East Main streets. President, E. O. Baker, Room 16 Syndicate Block; recording secretary, Jno. Simon, 416 Powers Building; financial secretary, A. Frazier, 416 Powers Building.

*No. 243, Vincennes, Ind.—Meets every Wednesday night at Odd Fellows Building, corner Second and Broadway street. President, W. H. Patterson, 726 F G avenue; recording secretary, L. Johnson, 210 Vallmer street; financial secretary, C. F. Green, 621 North Seventh street.

†No. 244, East Mauch Chunk, Pa.—Meets first and third Sunday, 2 p. m., at Hess' Hall, Center street, between Fourth and Fifth. President, Wren Brown, East Mauch Chunk, Box 298; recording secretary, Anthony Armbruster, East Mauch Chunk, Box 232; financial secretary, J. P. Tracy, East Mauch Chunk, Box 195.

†No. 245, Toledo, O.—Meets every Friday night at Mulcahey Hall, 714 Monroe street. President, William Nagle, 1001 Summit street; recording secretary, Joseph Callahan, 912 Vinton street; financial secretary, Jacob Snyder, 586 South Erie street.

*No. 246, Steubenville, O.—Meets first and third Wednesday at Druids' Hall, North Fourth street. President, Frank Baker, Brilliant, Ohio; recording secretary, Wm. E. Gwynne, Lake Erie ave.; financial secretary, E. D. Richards, 418 N. Fifth street.

No. 247, Schenectady, N. Y.—Meets first and third Fridays of each month at Trades Assembly Hall, State street, near Canal bridge. President, Arthur E. Sparks, 20 Cora street; recording secretary, Herbert U. Merrill, 110 State street; financial secretary, Jas. F. Greenfield, Scotia, Schenectady County.

*No. 248, Chillicothe, Ohio.—Meets second and fourth Fridays at Federal Labor Union Hall, 158 East Fifth street. President, E. O. Jackson, 157 West Wotter street; recording secretary, Strander J. Swyers, 39 E. Second street; financial secretary, Strander J. Swyers, 39 E. Second street.

*No. 249, St. Catharines, Ontario.—Meets second and fourth Tuesday, each month, at Trades and Labor Hall, St. Paul street. President, James Crawford, St. Catharines, Ontario; recording secretary, J. Charles Clifford, St. Catharines, Ontario; financial secretary, Joseph Lappin, St. Catharines, Ont.

*No. 250 San Jose, Cal.—Meets every Tuesday in Building Trades Council Hall, First and Post streets. President, R. Kamp, First and San Fernando streets; recording secretary, Nick Cooper, 897 West San Carlos street; financial secretary, J. W. Hilton, 26 Sanborne avenue.

*No. 251, Pine Bluff, Ark.—Meets first and third Thursdays at Carpenters Hall, 112½ W. Banaque streets. President, S. W. Maxson; recording secretary, E. M. Baker, financial secretary, J. W. Johnson, 415 E. Second street.

*No. 252, Schenectady, N. Y.—Meets third Thursday each month at Ellis Building, State street. President, Charles Heffernan, 306 Jay street, continued; recording secretary, Ralph Lathroup, 6 Landen Terrace; financial secretary, C. A. Bates, Box 655.

*No. 253, Cedar Rapids, Iowa.—Meets first and third Thursdays, Federation Hall, corner First avenue and Second street. President, E. C. Gleason, 442 Fourth ave. W.; recording secretary, R. E. Gainer, general delivery, Cedar Rapids; financial secretary, C. A. Eisentraut, Iowa Tel. Co.

No. 254, Schenectady, N. Y.—Switch-board Makers.—Meets second and fourth Tuesdays at Machinists Hall, State and Jay streets. President, Jno. H. Cornick, 808 Grand avenue; recording secretary, A. M. Francois, 268 Broadway; financial secretary, W. J. G. Stewart, 511 Smith street.

*No. 255, Ashland, Wis.—Meets every Saturday evening Longshoresmen's Hall, corner Ellis avenue and Front street. President, W. M. Hosack, Tremont Hotel; recording secretary, Chas. Branzell, 1112 Sixth street, West; financial secretary, O. Scott Tomkins, 220 Seventh avenue, West.

*No. 256, Jackson, Miss.—Meets first and fourth Friday nights at Labor Hall, Capitol street. President, W. G. Olson, care Western Union Tel. Co., Jackson, Miss.; recording secretary, C. Marshall, 102 N. President street; financial secretary, S. C. Marshall, Century Theater.

*No. 257, Herkimer, N. Y.—Meets first and Third Friday of each month at Trades Assembly Hall North Main street. President, Martin Manion, North Washington street; recording secretary, Chas. Foote, 311 Eastern avenue; financial secretary, H. Vilhauer, 228 Perry street.

†No. 258, Providence, R. I.—Meets every Friday night at Hanley Building, 68 Washington street. President, Raymond V. Grant, 185 Pleasant street, Providence, R. I.; recording secretary, Frank S. Gallagher, 89 Hilton street, Pawtucket, R. I.; financial secretary, John F. Noon, 68 Union avenue, Providence, R. I.

*No. 259, Salem, Mass.—Meets first and third Tuesdays at I. O. O. F. Hall, Washington street. President, E. A. Oliver, 8 Granite street; recording and financial secretary, F. A. Coker, 41 March street.

*No. 260, Fort Wayne, Ind.—Meets Thursday night in Bank Block, Court street, opp. Court House. President, John T. Somers, 682 Hendricks street; recording secretary, Edward P. Schrantz, 826 Melita street; financial secretary, Leroy Zellers, 1420 Swanney ave.

†No. 261, Saratoga Springs, N. Y.—First and third Wednesday, Phythian Hall, 464½ Broadway. President, Chas. A. Druette; recording secretary, Leonard Ager, 11 Maple avenue; financial secretary, Wm. H. Owen, 42½ Caroline street.

*No. 262, Pullman, Ill.—Meets second and fourth Mondays at K. of P. Hall, Arcade Building, Pullman, Ill. President, Thomas Harvey, 509 Pullman avenue, Pullman, Ill.; recording secretary, A. M. Anderson, 161 One Hundred and Twelfth street, Roseland, Ill.; financial secretary, S. Daway, 6525 Ellis avenue, Chicago, Ill.

*No. 263, Shamokin, Pa.—Meets Thursday evening at 7.30, Room 7, Seller Zimmerman Building, Independence street. President, Harry T. Morgan, corner Pine and Diamond streets; recording secretary, Rosser Samuels, 118 Poplar street; financial secretary, Ed. Roth, 49 East Sunbury street.

†No. 264, Pittsfield, Mass.—Meets second and fourth Friday of every month at Bartenders Hall, England Block. President, S. W. Monkes, 124 Columbia avenue; recording secretary, M. C. Bly; financial secretary, C. C. Rowley, 240 Tyler street.

*No. 265, Lincoln, Neb.—Meets every Thursday at Central Labor Hall, 130 South Eleventh street. President, Mark T. Caster, 2181 S. street; recording secretary, Thos. E. Arundel, 660 South Nineteenth street; financial secretary, George W. Neally, 428 South Thirteenth street.

*No. 266, Sedalia, Mo.—Meets every Thursday at Glass Hall, corner Third and Lamine streets. President, John W. Henerman, 608 East Thirteenth street; recording secretary, L. Eiseman, 705 East Fifteenth streets; financial secretary, J. G. Fowler, 800 West Fourth street.

*No. 267, Schenectady, N. Y.—Meets first and third Saturday, at K. of C. Hall, State street, near Railroad. President, B. A. Cawley, 77 Second avenue; recording secretary, Joel Andry, 534 Mungford street; financial secretary, Leonard Beyer, 1218 State street.

*No. 268, Newport, R. I.—First and third Fridays, at Central Labor Hall, Thames street. President, C. W. Holm, 14 Bliss Road; recording secretary, Charles A. Bloom, 29 Denniston street; financial secretary, F. A. Bloom, 1 Harrison avenue.

*No. 269, Princeton, Ind.—Meets first and fourth Monday night, on second floor of City Building, Broadway and Prince streets. President, Charles Stevens, Telephone office; recording secretary, Lewis S. Kell, 211 South Seminary

December 1902

street; financial secretary, L. S. Kell, 109 North Prince street.

*No. 270, New York, N. Y.—Financial secretary, I. C. Grant, 33 Broadway street.

*No. 271, Altoona, Pa.—First and third Monday, each month, Carpenter's Hall, Eleventh avenue and Thirteenth street. President, Chas. Downs, 1018 Howard avenue; recording secretary, Frank T. Kleffman, 910 Lexington avenue; financial secretary, L. M. McPherson, 902 Chest. avenue.

*No. 272, Sherman, Texas.—Meets first and third Tuesdays, at Union Hall, southwest corner square. President, Frank H. Wright, care of Grayson Tel. Co.; recording secretary, W. L. Porter, care of S. W. Tel. Co.; financial secretary, E. F. Jerger, care of Grayson Tel. Co.

■*No. 273, Clinton, Iowa.—Meets second and fourth Wednesdays, at Labor Temple, Fifth avenue. President, J. J. Davie, 202 South Second street; recording secretary, O. A. Prest, 425 Dewitt street; financial secretary, C. C. Mathiesen, 629 Stockholm street.

*No. 274, Marinette, Wis.—Meets second and fourth Thursday at Trades Council Hall, Main street. President, Edwin A. Golden, Wells street; recording secretary, A. LaChance, 912 Elizabeth avenue; financial secretary, F. E. McWayne, 1838 Stephenson street.

*No. 275, Muskegon, Mich.—Meets first and third Thursday at Trades and Labor Hall, Western avenue. President, Edward Plunkett, 25 Sumner street; recording secretary, W. S. Krebs, 54 Western avenue; financial secretary, C. B. Morey, 52 Miller avenue.

*No. 276, West Superior, Wis.—Meets first and third Tuesdays, at Union Hall, Hammond Block. President, W. W. Kielly, 916 Baxter avenue; recording secretary, J. R. Tillotson, 1620 Oaks avenue; financial secretary, P. C. Miller, 1901 Butler avenue.

*No. 277, Kingston, N. Y.—Meets first and third Thursday evenings at Recorder's Room, City Hall, Reilly street and Broadway. President, H. H. Buckbee, Lucas avenue; recording secretary, Roswell Coles, 76 Malden Lane; financial secretary, H. Rumsey, 100 Downs street.

*No. 278, Rock Island, Ill.—Meets first and third Friday of each month at Turner Hall, Third avenue, between Fifteenth and Sixteenth streets, Rock Island, Ill. President, George Briggs, 2005 Rock Island street, Davenport, Iowa; recording secretary, Lewis Corry, 2015 Iowa street, Davenport, Iowa; financial secretary, Jay C. Mead, 655 East Sixth street, Davenport, Iowa.

No. 279, Chicago, Ill.—(Machine repairers, dynamo and switchboard tenders.)—Meets every Monday evening at 196 East Washington street. President, S. Bennett 1587 West Twelfth street; recording secretary, S. A. Hoemann, 44 Windrop Place; financial secretary, Jas. A. Pepper, 178 Dearborn avenue.

*No. 280, Hammond, Ind.—Meets first and third Friday at K. of P. Hall, 247 State street. President, Geo. Larson, Sibley street; recording secretary, S. J. Carpenter, 271 Michigan avenue; financial secretary, Harry Hill, 430 Indiana avenue.

*No. 281, New Orleans, La.—Meets first Friday in each month at McMahon's Hall, Dryades street, near Calliope. President, Chas. Kister, 2719 First street; recording secretary, P. Radlet, 1510 N. Robinson street; financial secretary, Geo. Lorrick, 615 Laurel street.

No. 282, Chicago, Ill.—President, P. Sullivan; 8738 Wallace street; recording secretary, E. Kelly, 5048 Aberdeen street; financial secretary, A. Fawcett, 6638 Halsted street.

*No. 283 San Francisco, Cal.—Meets every Tuesday, at Alcazar Building, 120 O'Farrell street. President, J. E. Barton, 2238 Shattuck avenue; recording secretary, C. H. Hanson, 108½ Fell street; financial secretary, William Coyle, 1728 Twelfth avenue south.

No. 284 Rochester, N. Y.—(Station men.)—Meets second and fourth Thursdays of each month, Sneider's Hall, 14 North Water street. President, A. D. Rees, 211 Frost avenue; recording secretary, W. J. K. Sutherland, 47 Elm street; financial secretary, S. B. Russell, 164 Cady street.

† No. 285, Lynn, Mass.—Financial secretary, H. Patten, 29 Hanover street.

No. 286, New Albany, Ind.—Meets every Monday night at Cigar Makers' Hall, State and Market streets. President, G. A. Robinson, Ohio Falls; recording secretary, O. L. Biel, 1103 East Oak street; financial secretary, J. F. Ulmer, 828 Pearl street.

No. 287, Philadelphia, Pa.—Meets every Wednesday evening in hall located at No. 287 N. 9th street. President, Jno. McKenna, 878 Markoe street; recording secretary, C. E. Lawrence, 1737 Vine street; financial secretary, H. T. Ulmer, 2855 Cleveland avenue.

*No. 288, Waterloo, Iowa.—Meets first and third Thursday at Central Labor Hall, 215½ E. Fourth street. President, W. J. Braydon; recording secretary, E. W. Fisher, Iowa Tel. Company; financial secretary, Chas. Brickley, P. O. Box 764.

† No. 289, Oakland, Cal.

*No. 290, Danville, Ill.—Meets every Monday night at I. B. E. W. Hall, East Main street. President, J. A. Webster, Central Union Telephone Co.; recording secretary, J. W. Manning, Central Union Telephone Co.; financial secretary, W. E. Crosley, Central Union Telephone Co.

*No. 291, Boise City, Idaho.—Meets every Friday evening at Labor Hall, Banack street, between Eighth and Ninth streets. President, W. W. Moore, P. O. Box 525; recording secretary, E. R. Cole, P. O. Box 525; financial secretary, T. H. Martin, P. O. Box 525.

*No. 292, Minneapolis, Minn.—Meets second and fourth Tuesdays at Union Temple, No. 8. President, S. L. Ackerman, 1600 Fifth avenue north; recording secretary, Wm. G. H. Riach, 108 Washington avenue south; financial secretary, G. W. Lee, 924 Plymouth avenue, North.

† No. 293, North Adams, Mass.—Meets every second Sunday at 11 a. m., at Sullivan Block, Main street. President, Fred. W. Pinkham, Holden street; recording secretary, Arthur A. Isbell, 80 Porter street; financial secretary, Edward S. Boylan, 18 School street.

*No. 294, Muncie, Ind.—Meets every Tuesday night at Union Labor Hall, Room 2, corner Walnut and Main streets. President, Clyde Zecke; recording secretary, Orvil Overcash; financial secretary, Ralph Garst, 405 Wheeling avenue.

*No. 295, Natchez, Miss.—President, L. T. Moore; financial secretary, C. R. Foreman, 209 South Broadway.

No. 296, Poughkeepsie, N. Y.—Meets first and third Monday each month, 405 Main street. President, Jno. McAbee, 26 Haight avenue; recording secretary, Fred Wiggan, 35 Market street; financial secretary, Jacob Ostrom, 37 South Bridge street.

*No. 297, Piqua, Ohio.—Meets second and Fourth Thursdays at Plock's Hall, 114 South Main street. President, Clark Reed, Piqua, Ohio; recording secretary, John Ballard, Tippecanoe City, Ohio; financial secretary, Henry Parlett, Troy, Ohio.

No. 298, San Francisco.—(Street car men.) Meets first and third Mondays at Unity Hall, 20 Eddy street. President, W. B. Haskell, 455 29th street; recording secretary, P. A. Clifford, 3327 17th street; financial secretary, William O. Thomas, 30 Bourbon place.

*No. 299, Camden, N. J.—Meets every Thursday at Daley's Hall, Northwest corner Seventh and Brick streets. President, John MacDougall, 815 Princeton avenue; recording secretary, R. A. Young, 638 Benson street; financial secretary, F. B. Fraser, 800 Kimber street.

*No. 300, Auburn, N. Y.—Meets first and third Thursdays, at C. M. B. A. Hall, Franklin street. President, Frank B. Cahill, Hotel Brunswick; recording secretary, J. J. Glynn, Hotel O'Neil; financial secretary, William Burns, 82 Pulisver street.

*No. 301, Texarkana, Ark.—Meets every Wednesday at Labor Hall, 204 Broad street. President, E. E. Chaffin, 220 Walnut street; recording secretary, M. Coffee; financial secretary, W. Adams, 1820 Maple street.

*No. 302, Peoria, Ill.—Meets First and third Tuesdays at 218 Main street. President, E. C. Gregg, 918 First avenue; recording secretary,

DEC. 1903

THE ELECTRICAL WORKER

H. C. Lupton, 504 St. James street; financial secretary, L. C. Crawley, 116 Dechman avenue.

*No. 303, Lincoln, Ill.—Meets first and third Wednesday of each month at Painters' Hall, East Pulaski street. President, C. S. Ransdell, South Kickpoo; recording secretary, W. S. Coddington, 318 Delavan street; financial secretary, C. E. Chowning, 302 Delavan street.

†No. 304, New Haven, Conn.—Meets every Tuesday night at Room 11 Masonic Temple Building, 708 Chapel street. President, W. A. Johnson, 771 Whitney avenue; recording secretary, W. M. Dutton, 542 Chapel street; financial secretary, Ch. Schmolke, 88 Franklin street.

*No. 305, Salt Lake City, Utah.—Meets every Monday at Electrical Workers' Hall, 11 W. First street south. President, Bert Cunningham, Salt Lake, general delivery; recording secretary, R. Baxter, 541 Ninth street east; financial secretary, R. Baxter, 541 Ninth street east.

*No. 306, Albuquerque, New Mex.—Meets first and third Tuesdays at 110 Gold avenue. President, M. Nash, Albuquerque, N. M.; recording secretary, Carl Gilliam, Albuquerque, N. M.; financial secretary, E. R. Hotelting, Albuquerque, N. M.

*No. 307, Cumberland, Md.—Meets first and last Friday night at No. 4 Engine House, Maryland avenue. President, George A. Eyer, 47 Maryland avenue; recording secretary, J. C. Dye, 97 North Mechanic street; financial secretary, R. Snyder, 17 Harrison street.

†No. 308, Beaumont, Tex.—Meets every Tuesday night at Carpenters' Hall, Main and Washington streets. President, M. E. Graves, Beaumont, Texas; recording secretary, J. S. Gibbs, Beaumont, Texas; financial secretary, W. G. Miller, 284 Pearl street.

†No. 309, East St. Louis, Ill.—Meets every Tuesday at District Council of Carpenters' Hall, Third street and Missouri avenue. President, E. O. Lynds, 718 Josephine street, East St. Louis, Ill.; recording secretary, C. Arnold, 22 North Main street, E. St. Louis, Ill.; financial secretary, E. B. Hunter, French Village, Ill.

*No. 310, Stamford, Conn.—Meets first and third Wednesday at Minor Post Hall.—President, Goodrich E. Risley, 221 Atlantic street; recording secretary, William A. Curran, 17 Dale street; financial secretary, Norman R. Wilcox, 100 Stillwater avenue.

*No. 311, Beloit, Wis.—Meets first and third Wednesday at Trades Council Hall, Bridge and Third streets. President, Chas. Ford, 774 Brooks street; recording secretary, H. E. Churchill, 110 East D street; financial secretary, A. J. Gilbertson, 1039 Prairie avenue.

*No. 312, Pocatello, Idaho.—Meets first and third Mondays at Eagle Hall, corner of First avenue and Center street. President, H. J. Reynolds; recording secretary, W. E. Mittenberger, P. O. Box 512.

*No. 313, Wilmington, Del.—Meets every Friday at 206 E. Fourth street, Fourth and French streets. President, Geo. Lyon, 422 East Sixth street; recording secretary, L. W. McClenahan, Bell Tel. Exchange; financial secretary, I. S. Lenderman, 912 Poplar street.

*No. 314, Tyler, Texas.—Meets second and fourth Wednesdays at Trades Assembly Hall, Southside Square. President, H. C. King, 740 W. Erwin street; recording and financial secretary, E. L. Ivey, 234 Adams avenue.

†No. 315, Chicago, Ill.—Meets first and third Monday in every month. President, E. Schweikher, 1975 N. Ashland avenue; recording secretary, C. B. Hopkins, 819 North Artesian avenue; financial secretary, J. Liebrich, 3632 Lasalle street.

*No. 316, Ogden, Utah.—Meets every Saturday at Union Labor Hall, 362 Twenty-fourth street. President, W. B. Gray, 618 Maryland avenue; recording secretary, Ed Jessop, 262 Thirty-third street; financial secretary, R. F. Dean, 2631 Grant avenue.

*No. 317, Ashland, Ky.—Meets Tuesday night at Central Labor Hall, corner Fifteenth and Greenup streets. President, S. Coulgrove; financial secretary, M. M. Argabrite, 115 West Winchester avenue.

†No. 318, Knoxville, Tenn.—Meets first and third Tuesdays of each month, Independant Hall,

718 Gay street. President, J. G. Harrison, Spring street; recording secretary, John McCarron, Market Square; financial secretary, Jess Waters, 712 Campbell street.

†No. 319, Pittsburg, Pa.—Meets second and fourth Monday of each month at K. of L. Hall, 535 Smithfield street. President, W. A. Kelly, 86 Oakland Square; recording secretary, J. J. Horner, 225 Lothrop street; financial secretary, Urban H. Friedman, 847 Estella street.

*No. 320, Paris, Tex.—Meets every Thursday night at Roundtree Building, North Main street. President, J. G. Sullivan; recording secretary, W. N. Banta; financial secretary, J. R. Hancock, Vineyard Hotel

*No. 321, La Salle, Ill.—Meets first and third Saturdays at Reed & O'Neil's Hall, 845 First street. President, Thomas Heffron, La Salle, Ill.; recording secretary, Noxie Dusch, 227 Bucklin street; financial secretary, Jos. B. Skovare, 328 Second street.

*No. 322, Raleigh, N. C.—Financial secretary, F. C. Doyle, 10 Salisbury street.

*No. 323, Fairmont, W. Va.—Meets Saturday nights at Musgrave Hall, Monroe street. President, H. S. Upton, care of C. D. & P. Tel. Co.; recording secretary and financial secretary, Wm. S. Devlin, 711 W. Fourth street.

*No. 324, Brazil, Ind.—Meets alternate Tuesday nights at United Mine Workers' Hall, Main and Walnut streets (Opera Block). President, J. L. Boone, care of C. U. Tel. Co.; recording secretary, Birt Stauts, 421 North Alabama street; financial secretary, L. M. Moore, 203 South Lambert street.

*No. 325, Binghamton, N. Y.—Meets every Friday night at C. L. U. Hall, 78 State street. President, F. S. Houston, 78 State street; recording secretary, J. Buckman, 21 Mary street; financial secretary, W. Bidwell.

*No. 326, Connellsburg, Pa.—Meets second and fourth Mondays at Plumbers' Hall, No. 108 North Pittsburg street. President, Alex. Angus, Connellsburg; recording secretary, Frank Buttermore, New Haven, Pa.; financial secretary, G. S. McClay, 118 N. Pittsburg street.

*No. 327, West Palm Beach, Fla.—Meets first and thirds Monday at Central Labor Hall, Clematis avenue. President, E. W. J. Parrish; recording and financial secretary, Stephen L. Harman, P. O. Box 451.

*No. 328, Oswego, N. Y.—Meets every Tuesday night at Mullin's Hall, 90 East First street. President, John Feeney; recording secretary, John Schaffer, 111 East First street; financial secretary, Frank Gallagher, 77 East Eighth street.

*No. 329, Shelbyville, Ind.—Meets every Friday night at Union Hall, Public Square. President, W. J. Smith, 143 East Walker street; recording and financial secretary, Alfred C. Lee, Second street.

*No. 330, Meridian, Miss.—Meets first and third Thursday at Federation of Labor Hall, Fourth street, between Twenty-third and Twenty-fifth avenues. President, J. H. McArthur, Seventeenth and Thirty-fifth sts.; recording secretary, G. A. Westbrook, Nineteenth street and Thirty-fourth avenue; financial secretary, E. R. Dyer, Nineteenth avenue, between Eleventh and Twelfth street.

*No. 331, Long Branch, N. J.—Meets first and third Monday each month at Phil Daly's Hose Company's Hall, Second avenue. President, Austin Hurley, 304 Bath avenue, Long Branch, N. J.; recording secretary, financial secretary acting until we can get a brother to hold it; financial secretary, Jno. Coles, Jr., Box 127, Station B, Long Branch, N. J.

*No. 332, Sault Ste. Marie, Mich.—Meets Tuesday night, at La Lond Block, Ashmun streets. President, Dave Howey, 235 Ridge street; recording secretary, R. McClamchey, 508 Spruce street; financial secretary, C. Van Dusen, 809 Young street.

*No. 333, Emporia, Kans.—Meets every Tuesday night at 328½ Commercial street. President, E. McKinsey, 101 So. West street; recording secretary, W. M. Johnson, 709 Merchant street; financial secretary, W. C. Prince, 210 So. Merchant street.

DEC. 1903

* No. 334, Whatcom, Wash.—Financial secretary, G. L. Crews, 1481 Humbolt street.

* No. 335, Springfield, Mo.—Meets Wednesday, Odd Fellows Hall, 302 Boonville street. President, Jno. Stowe, 438 Harrison avenue; recording secretary, E. D. Croft, 734 Robinson avenue; financial secretary, R. M. Sutton, 507 W. Ohio street.

* No. 336, Oskaloosa, Iowa.—Meets first and third Tuesdays, at Engineer's Hall, West High avenue. President, W. F. Fortune, Oskaloosa; recording secretary, John Teos, Oskaloosa; financial secretary, G. W. Gordon, 207 E. Third avenue.

* No. 337, Chicago, Ill.—Meets second and fourth Mondays at Dewey Hall, 70 Adams street. President, J. J. Sullivan, 366 North Park avenue; recording secretary, P. H. Hammang, 4226 Grand Boulevard; financial secretary J. J. McCabe, 4228 Wabash avenue.

* No. 338, Denison, Tex.—Meets every first and third Mondays at Labor Hall, 202½ W. Main street. President, C. D. Sloan, 211½ W. Main street; recording and financial secretary, J. R. W. Pratt, 529 Murray street.

* No. 339, Sterling, Ill.—Meets first and third Wednesday at Labor Hall, 308 Locust street. President, Geo. Thomas, Sterling, Ill.; recording secretary, John Powers, 102 Thirteenth avenue; financial secretary, R. L. Fairbrother, 1011 First avenue, Sterling, Ill.

* No. 340, Sacramento, Cal.—Meets first and third Mondays at Pythian Castle, corner Ninth and I streets. President, J. A. Crombach, 1009 Q street; recording secretary, E. G. Fletcher, 725 G street; financial secretary, C. W. Beaton, 1620 I street.

* No. 341, Ottawa, Ill.—President, Wm. F. Spore, 119 W. Washington street; recording secretary, P. Lavalle; financial secretary, Wm. H. Shafer, 1125 Post street.

* No. 342, New Brighton, Pa.—Meets Thursday, E. J. Ryan's Hall, corner Third avenue and Ninth street. President, W. H. Irons, Third street, Beaver, Pa.; recording secretary, Geo. J. Wolf, 1709 Fourth avenue, Beaver Falls, Pa.; financial secretary, J. L. Allwine, 654 Case street, Rochester, Pa.

* No. 343, Norwich, Conn.—Meet second and fourth Wednesday at Carpenters' Hall, Shetucket street. President, R. M. Kittson, Woodmansee avenue; recording secretary, Walter Holden, 150 Main street; financial secretary, W. H. Hall, 87 Cliff street.

* No. 344, New London, Conn.—Meets first and third Friday at Bacon Block, State street. President, W. H. Vibber, 24 Mountain avenue; recording secretary, C. C. Comstock, 5 Franklin street; financial secretary, John S. Loveless, 11 Berkley avenue.

* No. 345, Mobile, Ala.—Meets second and fourth Mondays at I. O. O. F. Hall, corner of St. Joseph and St. Michael streets. President, W. O. Seagraves, care of Southern Bell T. & T. Company; recording secretary, C. E. Hooks, care of W. U. Tel. Co.; financial secretary, J. L. L. Eastburn, Elmira street, second door east of Charles street.

* No. 346, Fort Smith, Ark.—Meets first and third Tuesday at K. of P. Hall, over 708 Gar. avenue. President, Nat. Graham, 21 N. Twelfth street; recording secretary E. M. Wright, 819 N. Fifth street; financial secretary, W. H. McDonald, 710 S. Eleventh and H streets.

* No. 347, Peru, Ind.—Meets first and third Friday at Teamster's Hall, Petty Block. President, Frank Seaman, 72 E. Fifth street; recording secretary, Elmer Burlingame, 217 E. Fifth street; financial secretary, Wm. Odum, 92 E. Eighth street.

* No. 348, Greenville, Tex.—Meets second and fourth Thursday at Labor Hall, 278 West Lee street. President, C. A. Duck, 182 South Travis street; recording secretary, W. Brame, 216 North Stonewall street.

* No. 349, Bangor, Me.—Meets every Wednesday at Lewis Block, 121 Main street, Room 1. President, B. P. Nickerson, 235 Center street; recording and financial secretary, J. C. Smith, 175 Ohio street.

* No. 350, Hannibal, Mo.—Meets first and third Monday at Trades Council Hall, corner of Main and Broadway. President, H. S. Lambrecht, 522

Broadway; recording secretary, Geo. M. Jackson, 220 Bird street; financial secretary, N. J. Given.

* No. 351, Meriden, Conn.—Meets first and third Wednesdays at Turners' Hall, Pratt street. President, F. E. Tuttle, Wallingford, Conn.; recording secretary, C. J. Maher, 44 Willow street; financial secretary, R. P. Collins, 40 Benjamin street

* No. 352, Lansing, Mich.—Meets second and fourth Tuesday at Labor Hall, Washington avenue, north. President, Bert Craus, Lansing, Mich.; financial secretary, D. B. Kinney, 218 St. Joe, East.

* No. 353, Toronto, Can.—Meets first and third Mondays, at Occident Hall, cor. Queen and Bathurst streets. President, D. Mathieson, 82 Mansfield avenue; recording secretary, J. Fyfe, 82 Mansfield avenue; financial secretary, J. Ferguson, 722 Dufferin street.

* No. 354, Salt Lake City, Utah.—Meets every Wednesday at 7.30 p. m., I. B. E. W. Hall, First, South and Main streets. President, W. H. Meldrum, P. O. Box 218; recording secretary, A. N. Thomas, P. O. Box 218; financial secretary, Robert Burns, P. O. Box 218.

* No. 355, Pittsburg, Pa.—Meets second and third Thursday at National Bank Building, Wilkinsburg, Pa. President, C. E. Dougherty; recording secretary, W. Waterworth, E. Pittsburg; financial secretary, Geo. M. Smith, P. O. Box, 217, E. Pittsburg.

* No. 356, Kansas City, Mo.—Meets every Monday, in Electrical Workers' Hall, 1833-35 Grand avenue. President, U. G. Barnes, 1505 Harrison street; recording secretary, F. J. Schadel, 1833-1835 Grand avenue; financial secretary, J. H. Lynn, 2740 Wabash street.

* No. 357, Pittston, Pa.—Meets first Thursday after the 15th at Advocate Office, Butler Block. President, John Sheridan, 17 High street, Pittston; recording secretary, P. F. Tool, Union street, Pittston; financial secretary, E. L. Rowan, 232 William street, Pittston.

* No. 358, Perth Amboy, N. J.—Meets first and third Thursdays at Carpenters' Union Hall, Sicker's Building, 138 Smith street. President, Julius Kundson, 78 New Brunswick avenue; recording secretary, Wm. McDonough, 48 East avenue; financial secretary, Ambrose Mather, 44 East avenue.

* No. 359, Iron Mountain, Mich.—Meets first and third Sundays, at Russell's Hall, 710 Brown street. President, B. G. Hull, Norway, Mich.; recording secretary, S. Trethway, 219 D street; financial secretary, C. Carlson, 1120 River avenue.

* No. 360, Sioux Fall, S. D.—Meets second and fourth Wednesday at Labor Hall, Syndicate Block. President, M. G. Lacy; recording secretary, E. C. De Long, 621 S. Main avenue; financial secretary, F. B. Harris, E. Eighth street.

* No. 361, McKeesport, Pa.—President, George Griffith, Charlerol, Pa.; recording secretary, John J. Sullivan, McKeesport, Pa.; financial secretary, H. C. Bamford, McKeesport, Pa.

* No. 362, Kankakee, Ill.—Meets every Monday at German I. O. O. F. Hall, 204 Court street. President, F. E. Jeffers, Hospital, Illinois; recording secretary, H. H. Boysen, 162 Dearborn avenue; financial secretary, C. C. Riley, 108 Rosewood avenue.

* No. 363, Asbury Park, N. J.

* No. 364, Guthrie, Okla.—Meets first and third Tuesdays at German Hall, 114 N. Second street. President, J. D. Runkle, Guthrie, O. T.; recording secretary, James Seay, Guthrie, O. T.; financial secretary, A. H. Harmon, Guthrie, O. T.

* No. 365, Vicksburg Miss.—Meets first and third Saturdays at K. P. ante room, corner Clay and Washington streets. President, R. B. Zeilka, Walnut street; recording and financial secretary, John E. Ford 205 Homer avenue.

* No. 366, Allentown, Pa.—Meets Saturday at Nagle's Hall, Seventh and Turner streets. President, J. S. Hoffman, 1815 Court street; recording secretary, John F. Gaffney, 181 Leighman street; financial secretary, A. Weibel, 739 Fair street.

* No. 367, St. Louis, Mo.—Meets first and third Sundays, 2.20 p. m. President, C. A. Hose, 1927 Florrisant avenue, St. Louis, Mo.; record-

ing secretary, C. A. Liles, Madison, Ill.; financial secretary, G. E. Sutter, 4603 Cook avenue.

*No. 368.—New York, N. Y.—Meets second and fourth Wednesday, Union Hall, 1591 Second avenue. President, J. J. Strauss, 106 E. 118th street; recording secretary, Jas. S. Wellington, 263 W. 180th street; financial secretary, J. J. McCarty, 202 E. 96th Street.

*No. 369, Louisville, Ky.—Meets every Friday at Electrical Workers Headquarter, Fourth and Green streets. President, John Dieble, southwest corner Fifteenth and Pirtle streets; recording secretary, John W. Isaacs, Enterprise Hotel; financial secretary, D. Butterfield, 2642 W. Jefferson street.

*No. 370, Los Angeles, Cal.—Meets every Saturday at Council of Labor Hall No. 2, 438½ South Spring street. President, C. R. Holmes, 832 Judson street; recording secretary, Eldon E. Soper, 444 South Grand avenue; financial secretary, Hal Hamner, 819 West Avenue Fifty-one.

*No. 371, Redding, Cal.—Meets first and third Tuesdays at Carlson printing office, Lorenz Building. President, D. W. Rathburn, P. O. Box 124; recording secretary, W. C. Stringer; financial secretary, David Murdoch.

*No. 372, Boone, Iowa.—Meets first and third Fridays at North Side Union hall, 917 Tenth street. President, H. C. Elliott, 515 Tenth street; recording and financial secretary, A. J. Berl, 1556 Fifth street.

*No. 373, Oneida, N. Y.—Meets first Monday of every month at Trades Assembly Hall, corner of James and Elm streets. President, Irving B. Hawkins, 40 Seneca street; recording secretary, P. Lamont Barr, Elm street; financial secretary, Henry Gasler, Brown street.

*No. 374, Escanaba, Mich.—Meets every first and Third Friday evenings at Lemmer's Hall, 310 Ludington street. President, Geo. Roemer, 916 Well avenue; recording secretary, E. V. Smith, 510 Ludington street; financial secretary, Wm. Hellingenthal, 1508 Ayer street.

*No. 375, Jefferson City, Mo.—President, M. P. Gaddis, Jefferson City, Mo.; financial secretary, G. W. Fleming, Jefferson City, Mo.

No. 376, Chicago, Ill.—President, Thos. V. Costello, 646 W. Forty-fifth street; recording secretary, A. E. Tellefson, 207 W. Emerson avenue; financial secretary, Thos. Queenan, 196 E. Washington street.

*No. 377, Norristown, Pa.—President, Wm. S. Miller, 680 Cherry street; financial secretary, E. E. Godschalk, 202 E. Oak street.

?No. 378, Denver, Colo.—Meets second and fourth Fridays, 8 p. m., Room 218 Charles Block, corner of Fifteenth and Curtis streets. President, F. P. Bennett, 1481 Sixteenth street; recording secretary, S. H. Cleary, 1817 Glenarm street; financial secretary, A. C. Winsch, 742 South Twelfth street.

*No. 379, Greensburg, Pa.—Meets first and third Thursday of each month, at Glunts Hall, corner East Pittsburg street and Maple avenue. President, A. R. Mott, Franklin street, Greensburg, Pa.; recording secretary, Elmer Stahl, Greensburg; financial secretary, C. M. Morgan, East Ottermann street, Greensburg, Pa.

No. 380, Salt Lake City, Utah—Station men—Meets every second and fourth Monday at Emporium Building, 11 West First South Street. President, H. P. Burt, 1519 Indiana avenue; recording secretary, T. C. Husbands, P. O. Box 971, financial secretary, T. C. Husbands, P. O. Box 971.

No. 381, Chicago, Ill.—Fixture hangers—Meet first and last Tuesdays at Koch's Hall, 106 East Randolph street. President, Ed. Aplin, 2807 Union avenue; recording secretary, O. H. Owen, South Harvey, Ill.; financial secretary, O. A. Lawson, 449 Cornelius street.

*No. 382, Columbia, S. C.—Meets Wednesday night, at Independence Hall, over Independent Engine House, between Main and Assembly streets. President, Luther Garron, 1802 Taylor street; recording secretary, J. B. Dodonhoff, 1011 Lady street; financial secretary, M. W. Ksele, 1032 Elmwood avenue.

*No. 383, Mattoon, Ill.—President, Harry Schrock; recording secretary, Ned Malaine; financial secretary, L. Morganstein.

*No. 384, Sydney, Nova Scotia—Meets every second and Wednesday of each month at C. M. B. A. Hall, George street, Sydney, C. B. President S. De Witt, Sydney, N. S.; recording secretary, Oscar L. Boy, Sydney, C. B.; financial secretary, Angus Hugh Cameron, 467 Esplanade street, Sydney, C. B.

*No. 385 Lawrence, Mass.—Meets Friday nights at Music Hall, 304 Common street. President, A. M. Winslow, 125 Farnham street; recording secretary, T. H. Hogarth, 86 Andover street; financial secretary, Chester Kavanah, 51 Walnut street.

*No. 386, New Iberia, La.—Meets first Friday of each month, corner Main and Corinne streets. President, George Fay; recording secretary, E. R. Chivers; financial secretary, W. A. Brouard.

*No. 387, Freeport, Ill.—President, C. L. Guion, 95 Cottonwood street; financial secretary, H. L. Brubaker, 214 Taylor avenue.

*No. 388, Palestine, Tex.—President, C. B. Turner; financial secretary, L. A. Pierce.

*No. 389, Paterson, N. J.—Meets every Sunday at 2 p. m., at Columbia Hall, 462 Main street. President, F. H. Holmes, Lodi, N. J.; recording secretary, E. S. Cole, 10 South Fifth street, Lake View; financial secretary, W. J. Jones, 654 Main street.

*No. 390, Johnstown, Pa.—Meets Thursday at Electrical Workers Hall, 357 Bedford street. President, Robert Fundenberg, 518½ Vine street; recording secretary, H. W. Apel, 581 Franklin street; financial secretary, F. W. Buchanan, 248 Adam street.

?No. 391, Los Angeles, Cal.—Financial secretary, J. F. Greaves, Johnston Hotel.

*No. 392, Troy, N. Y.—Meets every Thursday at 8 p. m., at Turner's Hall, River street, between Ferry and Congress. President, Fred Best; recording secretary, James Ward, 62 Grand street, Troy; financial secretary, J. W. Lindsay, Lynd House.

*No. 393, Detroit, Mich.—President, Andrew J. Molloy, 268 National avenue; recording secretary, R. J. Fitzgerald, 562 Jefferson avenue; financial secretary, C. W. Guinness, 505 Trumbull avenue.

?No. 394, Auburn, N. Y.—T. H. Mohan, 1 School street.

*No. 395, Kalamazoo, Mich.—Meets first and third Monday of each month, Trades and Labor Hall, South Burdick street. President, Geo. C. Milham, 722 Stockbridge ave.; recording secretary, Burton A. Whipple, 322 E. Lovell street; financial secretary, Morris W. Doyle, 1110 Clark street.

?No. 396, Boston, Mass.—Meets first and third Tuesdays, at Seaver Hall, Appleton street. President, F. E. Hunter, 114 Rogers avenue, Somerville, Mass.; recording secretary, D. R. McGregor, 241 Marriot street, Dorchester, Mass.; financial secretary, A. R. Young, 709 Broadway, Chelsea, Mass.

*No. 397, Quebec, Canada. Meets first and third Monday of each month at Montcalm Hall, Montcalm Market. President, Elzear L. Heureux, 394 St. Valier street; recording secretary, N. Mathurin 238 St. Valier street; financial secretary, A. Bouret, 18 Levis street.

*No. 398, St. Cloud, Minn.—Meets every second and fourth Saturday, at Workman Hall, corner Fifth avenue and First street, south. President, Geo. Marvin, St. Cloud, Minn.; recording secretary, Harry Hamlin, Sauk Rapids, Minn.; financial secretary, F. B. Doten, 618 Sixth avenue, south.

*No. 399, Portland, Me.—Meets Thursday at Inclasp Hall, 53 Temple street.—President, Arthur McDonald, 20 Plum street; recording secretary, E. B. Waite, 6 Farrington Place; financial secretary, F. E. Sargent, 308 Portland street.

*No. 400, Ottawa, Ontario.—Meets second and fourth Wednesdays at Murphy's Hall, Sussex street. President, Charles Aitkens, 241 Lyon street, Ottawa, Ont.; recording secretary, W. H. Hickey, 136 Slater street, Ottawa, Ont.; financial secretary, C. G. Keys, 467 Rideau street, Ottawa, Ont.

*No. 401, Burlington, Iowa.—Meets every Monday evening at Carpenters Hall, Third and Jefferson street. President, Chas. McGuire, North,

ern Hotel; recording secretary, E. W. Bischoff-Sherill; Moore Elec. Co.; financial secretary, Chas. Caster, 624 N. Fourth street.

† No. 402, Portchester, N.Y.—Meets every first and third Monday nights at 8 each month, at Washington Hall, 115 North Main street. President, Andrew Bell, 26 Haseco avenue; recording secretary, Daniel B. Purdy; P. O. Box 240, Port Chester, N. Y.; financial secretary, J. C. Irving, Greenwich, Conn.

* No. 403, Meadville, Pa.—Meets every second and fourth Wednesdays at Central Labor Hall, South Water street. President, Fred. A. Berg, 872 Liberty street; recording secretary, Claud Ewing, 217 Pine street; financial secretary, A. R. Simpson, Phoenix Hotel.

No. 404, Denver, Colo.—(Winders)—Meets every Tuesday at 612 Charles Building. President, W. C. Metzgar, 115 West Bayard street; recording secretary, A. V. Gay, 1246 Clarkson street; financial secretary, Jack H. Cook, Hotel Midland.

* No. 405, Houghton, Mich.—Financial secretary, F. E. Jackson.

* No. 406, Ardmore, Ind. Ter.—Meets every Friday night at Union Hall, West Main street. President, E. M. Parker, Ardmore, I. T.; recording secretary, Luther Anderson, Box 68; financial secretary, La Mont Evers, P. O. Box 346.

* No. 407, Marquette, Mich.—Meets every first Saturday and Third Friday each month at Freis Hall, Front and Washington streets. President, Oscar H. Stewert, 339 West Alger street; recording secretary, C. E. Ellstrom, 321 West Bluff street; financial secretary, Geo. H. Kemper, 511 West Ridge street.

* No. 408, Missoula, Mont.—Meets every second and fourth Tuesday at Fireman's Hall, West Main street. President, C. H. Christensen, 805 East Front street; recording secretary, R. G. Rowland, Missoula; financial secretary, E. H. Collar, 301 South Second street.

* No. 409, Ithaca, N. Y.—Meets first and third Saturday of every month at Central Labor Union Hall, East State street. President, W. W. Hardinger, South Cayuga street; recording secretary, C. M. Smith, 206 North Cayuga street; financial secretary, O. Rittenhouse, 505 South Albany street.

† No. 410, Albany, N. Y.—Meets first and third Mondays at 8 P. M., Laventall Building, Hounds avenue and South Pearl street. President, Geo. E. Gray, 339 Clinton avenue; recording secretary, Carl F. Mull, 461 Clinton avenue; financial secretary, Frank C. Shanno, 130 Second ave.

* No. 411, Warren, O.—Meets every other Wednesday night at Amalgamated Association Hall, Main street. President, E. S. Kelley, Tod ave.; recording secretary, Fred W. Izant, 500½ Niles avenue; financial secretary, Sam F. Messer, Tod avenue.

* No. 412, Mankato, Minn.—President, W. C. Lestico; financial secretary, L. H. Snyder, 417 Plum street.

* No. 413, Manila, P. I.—President, Wm. Wirt, Box 547; financial secretary, C. H. Hulbert, Box 547.

* No. 414, Macon, Ga.—Financial secretary, J. R. Hoffer, 556 Second street.

* No. 415, Cheyenne, Wyo.—President, S. M. Wessels, care Electric Light Company; financial secretary, F. P. Edelind, 218 E. Sixteenth street.

† No. 416, St. Joseph, Mo.—President, A. E. McCarty, 2822 S. Twenty-second street; recording secretary, W. L. Harman, 1002 Francis street; financial secretary, J. A. Wells, 113 E. Isabell street.

* No. 417, Newburgh, N. Y.—Meets every second and fourth Saturday at Labor Hall, Ann street, between Johnson and Liberty. President, John Gilroy Mezger, 1 High street; recording secretary, Raymond Hathaway Williams, 216 First street; financial secretary, Thomas Perrott, 82 Smith street.

* No. 418, Mt. Vernon, Ind.—Meets second, third and fourth Monday nights at Franks Place, Main street, between Second and Third. President, Roscoe Combs, Mt. Vernon; recording and financial secretary, J. C. Maier, 328 Lower Sixth street.

* No. 419, Jacksonville, Ill.—Financial secretary, O. Sorrells, Jacksonville.

* No. 420, Moberly, Mo.—E. A. Willott, 208 N Fourth street.

* No. 421, Watertown, N. Y.—President, G. B. Dickerson; financial secretary; Wm. C. Anderson, 1 Arlington street.

* No. 422, Hackensack, N. J.—Meets first and third Wednesdays at Engels Parlors, 45 Main street. President, D. T. Evans; recording secretary, B. M. Pratt, 56 Main street; financial secretary, W. Kingsley.

* No. 423, Montreal, P. Q.—Meets First and Third Friday each month, at Arcanum Hall, 2444 A St. Catherine street. President, L. E. McDonald, 2 Brunswick street; recording secretary, T. W. Rothery, 31½ Latour street; financial secretary, F. W. Cotten, 534 Antoine street.

† No. 424, Milwaukee, Wis.—Meets every Thursday at Kizer Hall, Fourth street, north of State. President, F. M. Stark, 717 St. Paul avenue; recording secretary, J. W. Daley, 496 Twenty-seventh street; financial secretary, J. V. Field, 459 Sixth avenue.

* No. 425, Wilmington, Del.—Meets every Friday evening, northeast corner Eighth and Orange streets. President, Henry T. Baker, 823½ Madison street; recording secretary, Isaac A. Gray, 1103 Shallcross avenue; financial secretary, R. S. Hertzog, 1112 King street.

† No. 426, Milwaukee, Wis.—President, D. McQuarrie, 910 Third street; recording secretary, M. Pural, 811 Second avenue; financial secretary, Charles Nauertz, 648 Madison street, rear.

† No. 427, Springfield, Ill.—Meets the first and third Wednesday, at I. B. E. W. Hall.—President, J. D. Valentine, 411 W. Comedy street; recording secretary, A. H. Barth, 615 E. Jackson, street; financial secretary, William Rathford, 711 E. Black street.

No. 428, Bakersfield, Cal.—President, F. T. Andrews; financial secretary, H. R. Leeds, 2617 M street.

No. 429, Columbus, Ga.—President, W. W. Vincent; financial secretary, Frank Hudson, care So. Bell T. & T. Co.

* No. 430, Racine, Wis.—Meets second and fourth Saturday at 8 p. m., of the month, at Trades Labor Hall, Fourth and Main streets. President, J. P. Browne, 1521 State street; recording secretary, Fred M. Brooker, Box 247; financial secretary, D. A. Howard, 1917 N. Chatham.

* No. 431, Frederick, Md.—President, S. F. Gardner; financial secretary, C. E. Young, 90 East South street.

* No. 432, Eau Claire, Wis.—President, G. W. Bailey, Menomonie, Wis.; recording secretary, F. C. Stanley, 661 Wisconsin street; financial secretary, L. M. Marsh, 521 Congress street.

No. 433, Fremont, Ohio.—Meets First and Third Tuesday, Woodmen of America, corner Front and State street. President, Ed. E. McCarthy, 337 Harrison street; recording secretary, John O. Lehr, corner State and Stone; financial secretary, Wm. P. Stevens, Fremont, care U. S. Telephone Co.

* No. 434, Douglas, Ariz.—President, J. H. Stewart; financial secretary, F. C. Farrington-care Douglas Imp. Co.

* No. 435, Marion, Ohio.—President, Ferd Rowe, 269 North Oak street, Marion, O.; financial secretary, M. A. Charlton, E. Main street, Galion, O.

* No. 436, Oneonta, N. Y.—President, Carl L. House, 12 Cherry street; recording secretary, M. J. Young; financial secretary, Jno. O'Brien.

* No. 437, Fall River, Mass.—Financial secretary, H. A. Manchester.

No. 438, Greater New York, N. Y. (Street car wiremen)—President, J. W. Schmidt, 688 Gates avenue, Brooklyn, N. Y.; financial secretary, D. Cullinane, 1482 Avenue A, New York, N. Y.

* No. 439, Alliance, Ohio.—Meets Second and Fourth Wednesday, second floor, over Post-Office, East Main and Seneca. President, A. N. Stanley, 213 W. Main Street; recording secretary, Jno. McCaskey, care O. B. Mason, R. F. D., No. 2; financial secretary, Henry Erhardt, W. Main street.

* No. 440, Grand Rapids, Wis.—President, Geo. M. Huntington, Grand Rapids; recording secretary, Chas. M. Dougherty, Grand Rapids; financial secretary, John H. Noyes, Grand Rapids.

Dec. 1963

*No. 441, Janesville, Wis.—President, James Frosher, Janesville; recording secretary, Ed. Barren, Janesville; financial secretary, James Shuler, Janesville.

*No. 442, Spartanburg, S. C.—Financial secretary, Fred Schueler, care of So. Bell Tel. Co.

*No. 443, Key West, Fla.—Meets every Tuesday at Electric Company Plant. President, J. B. Hurst; recording secretary, J. H. Harris, 809 Galveston street; financial secretary, J. H. Harris, 809 Galveston street.

*No. 444, Richmond, Ind.—Financial Secretary, J. L. McNell, 1189 Mainstreet.

No. 445, Battle Creek, Mich.—Financial secretary, E. Wideman, care Mich. Tel. Co.

*No. 446, Columbus, Ohio.—Meets every Friday night at 7:30 p. m., at Lazarus' Block, High and Town streets. President, C. L. Sprague, Fourth and Oakland avenues; recording secretary, Harry Kerus, 167½ So. High street, room 15; financial secretary, Frank Naus, 51½ W. State street.

BUSINESS AGENTS.

No. 1, St. Louis, Mo.—Frank Kinsley and H. J. Porter.

No. 2, St. Louis, Mo.—H. Myers, 2625 A Olive street.

No. 3, New York.—Ed. Kelly, 154 East Fifty-fourth street. James Stanton, D. H. Armstrong. Ed. Arrington.

No. 5, Pittsburgh, Pa.—E. P. Allman, 302 Grant street.

No. 6, San Francisco, Cal.—A. E. Yoell, 27 Sixth street.

Cook County Locals.—No. 9, McCollins; No. 134, John Maloney, C. M. Bloomfield, Samuel Grimbolt; No. 279, N. Bonnist; No. 376, James Y. Lamb. Address for each, 196 East Washington street, Chicago, Ill.

No. 14, Pittsburgh, Pa.—George Schmatzinetz, 302 Grant street.

No. 17, Detroit, Mich.—E. G. Smith, 439 Elmwood avenue.

Nos. 18 and 356, Kansas City, Mo.—Frank Burns, 1333 Grand avenue.

No. 21, Philadelphia, Pa.—Charles Kirk, 1820 Vine street.

No. 23, St. Paul, Minn.—Joseph Macaulay, 586 West Central avenue.

No. 25, Terre Haute, Ind.—A. R. Markle, 1027 Seventh avenue.

No. 28, Baltimore, Md.—W. C. Worley, 1601 Edmonson avenue.

No. 38, Cleveland, Ohio.—Frank Estinghausen, 88 Prospect street.

No. 39, Cleveland, Ohio.—Frank J. Sullivan, 88 Prospect street.

No. 41, Buffalo, N. Y.—A. Cunningham, Council Hall.

No. 43, Syracuse, N. Y.—H. E. Yorker, 137 Wood avenue.

No. 45, Buffalo, N. Y.—James Shane, 78 South Division street.

No. 61, Los Angeles, Cal.—C. P. Lofthouse, 124 East Third street.

No. 68, Denver, Colo.—F. Shallert, P. O. Box 614.

No. 86, Rochester, N. Y.—J. Monaghan, room 3, Durand Building, 58 Main street.

No. 95, Joplin, Mo.—W. A. Nielson, 715 Jackson.

No. 98, Philadelphia, Pa.—Jas. S. Meade, 1821 Arch street.

No. 103, Boston, Mass.—E. T. Mallory, 987 Washington street.

No. 112, Louisville, Ky.—Edw. Boyle, McDowell Building, Fourth and Green streets.

No. 114, Toronto, Canada.—W. J. Middleton, 18 Shaftesbury avenue.

No. 154, Rock Island, Ill.—Charles Norton, P. O. Box 225.

No. 162, Omaha, Nebr.—F. Wittus, Labor Temple.

No. 184, Galesburg, Ill.—J. H. Shull, 266 Duffield avenue.

No. 210, Atlantic City.—Marshall Burkins, 117 N. Pennsylvania avenue.

No. 212, Cincinnati, Ohio.—J. A. Cullen, southwest corner Twelfth and Pine streets.

No. 235, Cincinnati, Ohio.—M. L. Purkey, 1185 Vine street.

No. 324, Brazil, Ind.—C. J. Boyland, Hoffman House.

No. 356, Kansas City, Mo.—F. Burns, 1333 Grand avenue.

No. 381, Chicago, Ill.—Edward N. Nockels, 10 E. Randolph street.

No. 390, Johnstown, Pa.—M. R. Brennan, 244 Levergood street.

OVER 130 MILES AN HOUR.

The high-speed electrical experiment on the Morienfelde-Zossen Railroad, Germany, ended for the season on November 21. About 3,000 spectators gathered at Dallwitz, where a speed of 130½ miles per hour was attained three weeks ago, and has not been surpassed at the subsequent trial.

About \$1,000,000 have been expended without financial return, in demonstrating the economical working of 100 miles' velocity. The so-call study company which has been conducting the experiments has not decided how to utilize the results reached, but tentative communications have been opened with some of the electric railway men of the United States which have not yet taken definite shape.

LINEMENS WITH THIS CLIMBERS

I PRE-PAY express and send 1 pair to any address in the United States or Canada for \$2 in advance. I send 1 pair for \$1.50, C. O. D. 2 extra plugs by mail, post-paid, 25 cents.

JOHN DONNELLY
Box 493, Branford, Conn., U. S. A.

UNION MADE

After 12 years' test of various climbers, I find the new pattern solid plug "Donnelly Climbers" THE BEST I EVER USED. The tread being 1½ INCHES WIDE and the plug dropping just right, makes them very easy to work on. Mr. Donnelly is THOROUGHLY RELIABLE, he has had 16 YEARS' EXPERIENCE in climber making, and employs ONLY UNION HELP.

SAMUEL JOHNSON,
President Local Union No. 90, I. B. E. W.
New Haven, Conn.

VERY IMPORTANT

to Telephone Workers and others. Do you know that the Acme Telephone Holder is the best seller, and gives better profits than any other on the market? Sample Single Holder, \$2.00, Double Holder, \$3.00, prepaid to any address.

SKELLY & CO., 312 Electric Bldg., Cleveland, Ohio.

CLASSIFIED DIRECTORY OF LOCAL UNIONS.

Alabama.	Fort Wayne. 188	Kentucky.	Moberly. 420	Schenectady. 282
Birmingham..186	Fort Wayne..260	Topeka.....225	St. Joseph.....40	Schenectady..284
Birmingham..227	Hammond....280	Wichita.....144	St. Joseph.....416	Schenectady..247
Mobile.....345	Indianapolis..10	Ashland.....317	St. Louis.....1	Schenectady..252
Arizona.	Lafayette.....222	Henderson....82	St. Louis.....2	Schenectady..254
Douglas.....484	Logansport....209	Lexington....183	St. Louis.....59	Schenectady..267
Arkansas.	Marion.....158	Louisville....112	St. Louis.....189	Syracuse.....48
Fort Smith...346	Mt. Vernon....418	Louisville....369	St. Louis.....199	Syracuse.....79
Hot Springs..215	Muncie.....294	Owensboro....216	St. Louis.....367	Troy.....392
Little Rock...126	New Albany....286	Paducah.....177	Sedalia.....266	Utica.....42
Pine Bluff....251	Peru.....347	Louisiana.	Springfield....385	Utica.....181
Texarkana....301	Princeton....269	New Iberia....386	Montana.	Watertown....421
California.	Richmond....444	New Orleans....4	Anaconda....200	North Carolina.
Bakersfield....428	Shelbyville....329	New Orleans....130	Butte.....65	Asheville....288
Fresno.....169	South Bend....182	New Orleans....281	Great Falls....122	Raleigh.....322
Los Angeles...61	Sullivan....219	Shreveport....194	Helena.....185	Wilmington....138
Los Angeles...116	Terre Haute....25	Maine.	Missoula.....408	
Los Angeles...370	Vincennes....243	Bangor.....349	Mexico.	Ohio.
Los Angeles....391	Indian Territory.	Portland....399	Monclova Coa- hulia.....51	Akron.....89
Oakland....289	Ardmore....406	Illinois.	Nebraska.	Alliance.....439
Redding....371	Alton.....128	Baltimore....27	Lincoln....265	Ashtabula.....143
Sacramento...36	Aurora.....149	Baltimore....28	Omaha....22	Canton.....178
Sacramento...340	Belleville....50	Cumberland....307	Omaha.....162	Chillicothe....248
San Francisco..6	Bloomington....197	Frederick....431	New Hampshire.	Cincinnati....30
San Francisco..151	Champaign....208	Massachusetts.	Manchester....229	Cincinnati....212
San Francisco..283	Chicago.....9	Boston.....103	New Jersey.	Cincinnati....235
San Francisco..298	Chicago.....49	Boston.....104	Asbury Park....363	Cleveland.....88
San Jose....250	Chicago.....78	Boston.....396	Atlantic City....210	Cleveland.....39
Stockton....207	Chicago.....134	Brockton....223	Atlantic City....211	Columbus.....64
Vallejo....180	Chicago.....279	Lawrence....385	Camden....299	Columbus....446
Colorado.	Chicago.....282	Lowell.....46	Hackensack....422	Dayton.....118
Colo. Springs..113	Chicago.....315	Lynn.....285	Jersey City....15	Dayton.....241
Colo. Springs..233	Chicago.....337	North Adams....293	Jersey City....164	East Liver- pool.....98
Cripple Creek..70	Chicago.....376	Pittsfield....167	Long Branch....331	Fremont.....438
Denver.....68	Chicago.....381	Pittsfield....264	Newark.....52	Hamilton....206
Denver.....121	Danville....290	Salem.....259	Newark.....87	Lima.....32
Denver.....378	Decatur....242	Springfield....7	Newark.....190	Lorain.....237
Denver.....404	East St. Louis....309	Worcester....96	Newark.....239	Marietta.....195
Pueblo.....12	Elgin.....117	Michigan.	Paterson....102	Marion.....485
Connecticut.	Freeport....387	Ann Arbor....171	Paterson....389	Massillon.....35
Bridgeport....146	Galesburg....184	Battle Creek....445	Perth Amboy....358	Mt. Vernon....97
Hartford....87	Jacksonville....419	Bay City.....160	Trenton....29	Newark.....172
Hartford....186	Joliet.....176	Benton Harbor....175	New Mexico.	Piqua.....297
Meriden....351	Kankakee....362	Detroit.....17	Albuquerque....306	Sandusky.....110
New London....344	Kewanee....94	Detroit.....183	New York.	Springfield....204
New Haven....90	Jacksonville....419	Detroit.....893	Albany....187	Steubenville....246
New Haven....304	Lincoln....303	Escanaba....374	Albany....410	Toledo.....8
Norwich....343	Mattoon....383	Fall River....437	Auburn....300	Toledo.....245
Stamford....810	Ottawa....341	Grand Rapids....75	Auburn....394	Warren.....411
Waterbury....11	Peoria....34	Grand Rapids....231	Binghamton....325	Youngstown....62
Delaware.	Peoria....302	Houghton....405	Brooklyn....110	Youngstown....64
Wilmington..425	Pullman....262	Iron Mount'n....359	Buffalo....41	Zanesville....160
Wilmington..318	Quincy....67	Jackson....205	Buffalo....45	
District of Colum- bin.	Rockford....196	Kalamazoo....395	Elmira....189	Oklahoma.
Washington....26	Rock Island....154	Lansing....352	Herkimer....257	Guthrie.....364
Washington....148	Rock Island....278	Marquette....407	Hornellsville....92	O k l a h o m a City.....155
Florida.	Springfield....198	Muskegon....275	Ithaca....409	
Jacksonville..100	Springfield....427	Saginaw....145	Jamesstown....106	Oregon.
Key West....443	Sterling....339	Sault Ste Marie....382	Kingston....277	Portland.....125
Tampa.....108	Streator....236	Traverse City....131	Middleton....101	Pennsylvania.
West Palm Beach.....327	Iowa.	Minneapolis....31	Newburgh....417	Allentown....366
Georgia.	Boone....372	Mankato....412	New Rochelle....127	Altoona.....271
Atlanta.....84	Burlington....401	Minneapolis....24	New York....3	Connellsburg....826
Columbus....429	Cedar Rapids....226	Minneapolis....292	New York....20	Easton.....91
Macon.....414	Cedar Rapids....253	St. Cloud....398	New York....270	East Mauch- Chunk....244
Savannah....88	Clinton....273	St. Paul....28	New York....368	Erie.....56
Hawaii.	Des Moines....55	Winona....74	New York....438	Greensburg....379
Honolulu....111	Dubuque....198	Mississippi.	Niagara Falls....68	Harrisburg....53
Idaho.	Fort Dodge....224	Jackson....256	Olean....214	Johnstown....390
Boise City....291	Mason City....170	Meridian....830	Oneida....373	Lancaster....71
Pocatello....312	Muscogee....208	Natchez....295	Oneonta....436	Meadville....408
Indiana.	Oskaloosa....336	Vicksburg....365	Oswego....328	New Brighton....342
Anderson....147	Ottumwa....173	Missouri.	Portchester....402	New Castle....33
Brazil....324	Sioux City....47	Hannibal....850	Poughkeepsie....286	Norristown....377
Elkhart....157	Waterloo....288	Jefferson City....375	Rochester....44	Oil City....228
Evansville....16	Kansas.	Joplin....95	Rochester....86	Philadelphia....21
	Atchison....19	Kansas City....18	Rochester....220	Philadelphia....98
	Emporia....333	Kansas City....356	Rochester....284	Philadelphia....240
	Fort Scott....152	Kansas City....356	S a r a t o g a Springs....261	Philadelphia....287
	Pittsburg....107	Kansas City....356	Schenectady....140	Pittsburg....5
				Pittsburg....14
				Pittsburg....319

CLASIFIED DIRECTORY OF LOCAL UNIONS—Continued.

Pittsburg.....855	Memphis.....192	Salt Lake City. 57	Wisconsin.	Victoria.....230
Pittston.....357	Nashville.....129	Salt Lake City.305	Appleton.....201	Manitoba.
Scranton.....31		Salt Lake City.354	Ashland.....255	Winnipeg.....166
Shamokin.....288		Salt Lake City.380	Beloit.....311	New Brunswick.
Sharon.....215	Texas.		Eau Claire.....432	St. John.....174
Uniontown.....101	Austin.....115	Virginia.	Grand Rapids.440	Nova Scotia.
Warren.....68	Beaumont.....221	Newport News	Janesville.....441	Sydney.....384
Wilkesbarre.....168	Beaumont.....308	165	La Crosse.....185	Ontario.
Philippine Island's	Dallas.....69	Norfolk.....80	Madison.....159	Hamilton.....105
Manila.....413	Dallas.....188	Richmond.....48	Marinette.....274	London.....120
Rhode Island.	El Paso.....13	Washington.	Milwaukee.....424	Ottawa.....400
Providence....99	Fort Worth.....156	Everett.....191	Milwaukee.....83	St. Catherines.249
Providence....258	Galveston.....124	Seattle.....77	Milwaukee.....426	Sault Ste Ma-
Newport.....268	Greenville.....348	Seattle.....202	Oshkosh.....187	rie.....85
South Carolina.	Houston.....66	Seattle.....217	Racine.....430	Toronto.....114
Charleston....179	Palestine.....388	Spokane.....73	West Superior.276	Toronto.....363
Columbia.....382	Paris.....320	Tacoma.....76		Quebec.
Spartansburg.412	Sherman.....272	Whatcom.....334	British Colum-	Montreal.....182
South Dakota.	Temple.....158	West Virginia.	bia.	Montreal.....427
Sioux Falls....360	Tyler.....314	Fairmont.....323	Vancouver....213	Quebec.....393
Tennessee.	Waco.....72	Parkersburg.....168		
Knoxville....318	Ogden.....316	Wheeling.....141		
		Wheeling.....142		

ROBINSON'S
KEY FOR THE
PRACTICAL ELECTRICAL WORKER

Electric Light, Power, Street Railway, Telephone, Telegraph and the Every-Day Tables explained in but few words, and illustrated entirely by drawings and cuts of connections from the very latest practice.

PRICE - TWO DOLLARS

Address all orders to

H. W. SHERMAN,
103 Corcoran Bldg., Washington, D. C.

The old rule of "buying the best"

IS A NOTABLE ONE FOR

Incandescent Lamps

THE BEST LAMP IS A NECESSITY

For Philadelphia Territory send your Order for

EDISON LAMPS

— TO —

THE PHILADELPHIA ELECTRIC CO.

N. E. Corner Tenth and Sansom Sts.

Write for Booklet, "INCANDESCENT LAMPS FOR ISOLATED PLANTS."

BOTH PHONES.

BLOOD POISON

We have a New Secret Remedy absolutely unknown to the profession. Permanent cures in 15 to 35 days. We refund money if we do not cure. You can be treated at home for the same price with the same guarantee to cure as if you came to our office. For many years we have been curing patients in every country in the world. Our treatment is in every sense a home treatment. If you have taken mercury or iodide potash and still have aches and pains, mucous patches in mouth, sore throat, pimples, copper-colored spots, ulcers on any parts of the body, hair or eyebrows falling out, it is this secondary blood poison we guarantee to cure. We solicit the most obstinate cases and challenge the world for a case we cannot cure. This disease has always baffled the skill of the most eminent physicians. For many years we have made a specialty of treating this disease with our Magic Cure, and we have \$300,000 capital behind our unconditional guarantee.

WE CURE QUICKLY AND PERMANENTLY

Our patients cured years ago by our Great Discovery, unknown to the profession, are today sound and well, and have healthy children since we cured them.

DON'T WASTE YOUR TIME AND MONEY

experimenting. We have the only cure. Absolute and positive proofs sent sealed on application. 100-page book FREE. No branch offices. Address fully as follows:

COOK REMEDY COMPANY,
1512 Masonic Temple, Chicago, Ill.

COOK REMEDY CO.

WEAR THE EMBLEM.



We have a supply of Buttons and Charms on hand. Now is the time to send in your order.

Solid Gold Buttons, - - - \$1.00

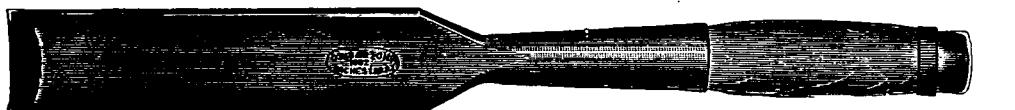
Rolled Gold Buttons, - - - .50

Solid Gold Watch Charms, - 5.00

Rolled Gold Watch Charms, 1.00

The Solid Gold Buttons and Charms are fully guaranteed. Address,

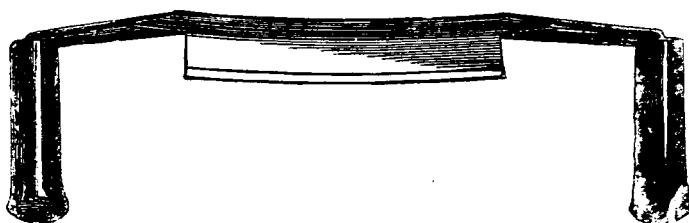
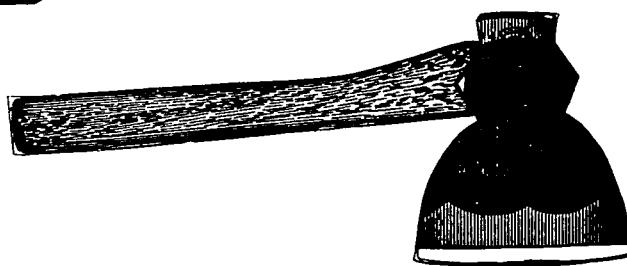
H. W. SHERMAN,
103-104 Corcoran Building,
Washington, D. C.



LINEMEN

We desire to call your attention to our

HIGH-GRADE



BARTON'S EDGE TOOLS

which we claim are superior to any in America. Our goods are for sale. See that our trade-mark, "D. R. Catalogue furnished



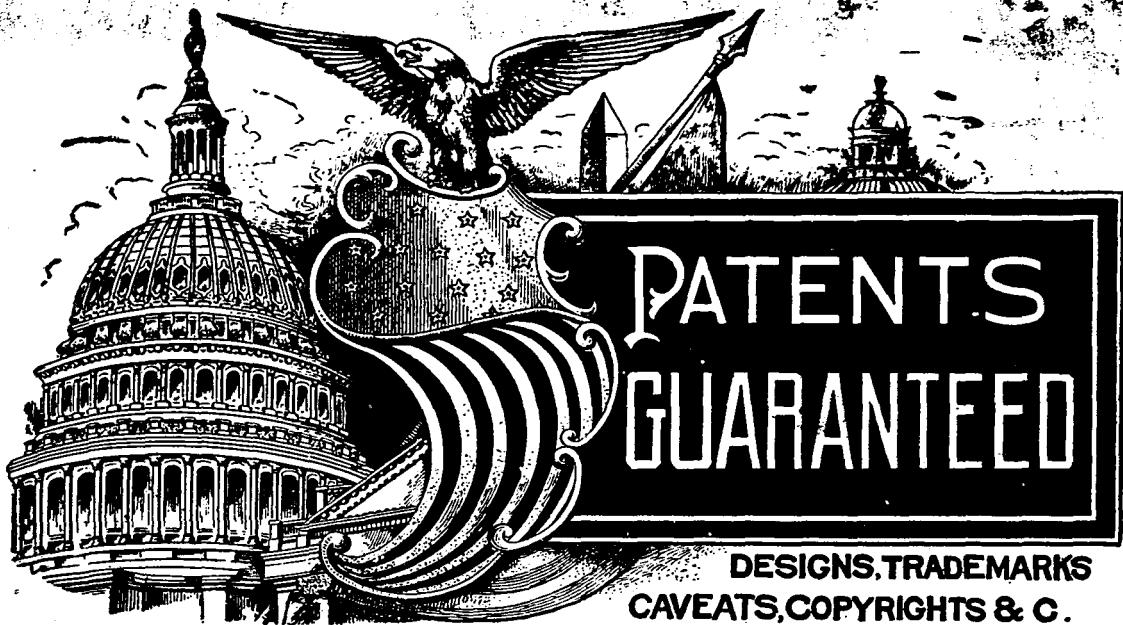
other similar line of goods made at all first-class hardware dealers. Barton," is stamped on every piece. on application.



JACK & CO., 18 Brown's Race,

Please
Mention
The
Worker.

Rochester, N. Y.



PATENTS SECURED OR FEE RETURNED.

HAVE YOU AN INVENTION?
IF SO, IT SHOULD BE PROTECTED BY PATENT.

The man who has ever conceived a meritorious invention and has failed to patent it until someone else has anticipated him has lost the opportunity of a lifetime to win a fortune with the least possible expenditure of time and labor.

There is no better way open to a poor man to acquire wealth and at the same time confer a lasting benefit upon humanity than to bring forth and perfect a good INVENTION.

The Patent Office stands ready to grant to every inventor a complete monopoly of his own ideas for the period of seventeen years, and through this monopoly large fortunes are constantly made by men who have no special advantages over their fellows, but who have been enterprising enough to promptly patent their ideas and thus enable themselves to enjoy the comfort which comes from a well-earned competence.

OUR OPINION AS TO PATENTABILITY FREE OF CHARGE.

Before anything is done toward making an application for patent, the inventor should first ascertain whether his invention is patentable. Anyone sending us a model, sketch, or photograph of an invention, together with a description of its parts, operation and advantages, will promptly receive our opinion free concerning the patentability of the same.

COST OF A PATENT.

If we report that a patent can be procured, our fee, \$25.00, must be remitted to us, and upon receipt of this we will immediately prepare the specification and drawings forming the application for patent and forward them to the inventor for approval and execution, together with a blue print of the drawings, which we furnish free of charge. When the papers have been executed and are ready for filing, the first Government fee of \$15, and \$5 to defray the cost of one sheet of Patent Office drawings, making \$20 in all, will be due. Thus it will be seen that the entire cost of filing an application through us is but \$45. The application will be prosecuted to an early conclusion, and when the patent is allowed notice will be sent to the inventor, after which he will have six months to pay the final Government fee of \$20. The entire cost of a patent is

\$65, comprising the Government fee of \$35, attorney's fee of \$25, and one sheet of Patent Office drawings, \$5.

OUR GUARANTEE SYSTEM.

When we report the invention patentable, we furnish the inventor with a signed certificate of patentability, under the terms of which we contract to return our fee in case we fail to obtain a patent. Our plan of guaranteeing our work was established after careful study and a long experience in the patent business. We therefore confidently claim that our "Guarantee System" is in all respects the most beneficial and equitable to all inventors.

OBTAINING ASSISTANCE FOR INVENTORS.

Our Guaranteed Certificate of Patentability is a great help to inventors who require financial assistance in order to protect their inventions by patents. Those who advance money to inventors for an interest in an invention always require positive assurance that the invention is patentable. Our signed certificate furnishes this necessary assurance, as well as guaranteeing to return the money advanced in case a patent is not secured.

WE ADVERTISE OUR CLIENTS' INVENTIONS FREE.

All patents secured through us are advertised free of charge in the "Patent Record," of Washington, New York, and Baltimore, an illustrated and widely circulated journal, consulted by manufacturers and promoters. We offer our clients the benefits of a special reading notice, in order to bring them into direct connection with those who may desire to buy or handle their inventions.

OUR ILLUSTRATED GUIDE BOOK MAILED FREE TO ANY ADDRESS.

Send for our handsomely illustrated guide book HOW TO OBTAIN A PATENT, the finest publication ever issued for free distribution. Gives full information in regard to patents, and is an invaluable book of reference for inventors. Contains ONE HUNDRED MECHANICAL MOVEMENTS, illustrated and described. Articles on WHAT AND HOW TO INVENT FOR PROFIT; THE VALUE OF INVENTIONS; HOW TO SELL PATENTS; WHAT INVENTIONS HAVE SOLD FOR; LAW POINTS FOR INVENTORS, etc., etc. Also contains thirty magnificent full page photo-engravings of views of Washington.

Address

EVANS, WILKENS & CO.

PATENT ATTORNEYS.

EVANS BUILDING.

WASHINGTON, D. C.